UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105

RECORD OF DECISION

MICRO STORAGE CORPORATION/INTEL MAGNETICS

SUPERFUND SITE

SANTA CLARA, CALIFORNIA

AUGUST 26, 1991

U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION IX

SAN FRANCISCO, CA

INDEX

RECORD OF DECISION

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Concurrences for
MICRO STORAGE/INTEL MAGNETICS SUPERFUND SITE
RECORD OF DECISION

Keith Takata — 9-25-91

for Harry Seraydarian, Director — Date
Water Management Division

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105

Concurrences for
MICRO STORAGE/INTEL MAGNETICS SUPERFUND SITE
RECORD OF DECISION

I concur with the remedy selected by the State of California for the MICRO STORAGE/INTEL MAGNETICS Superfund site and recommend that the Deputy Regional Administrator sign the Concurrence Record of Decision.

Rose Marie Caraway — 8/26/91

Rose Marie Caraway
Remedial Project Manager
South Bay Section — Date

Jim Hanson, Chief
South Bay Section — Date

Dave Jones, Chief
Superfund Remedial Branch — Date

Jerry Clifford
Assistant Director for Superfund
Hazardous Waste Management Division — Date

Jeff Zelickson, Director
Hazardous Waste Management Division — Date

DECLARATION

DECLARATION

1.0 SITE NAME AND LOCATION

MICRO STORAGE CORPORATION /INTEL MAGNETICS SUPERFUND SITE
Santa Clara, California

Micro Storage Corporation
Former Micro Storage Facility
2986 Oakmead Village Court
Santa Clara, Santa Clara County

Intel Corporation
Former Intel Magnetics Facility
3000 Oakmead Village Drive
Santa Clara, Santa Clara County

2.0 STATEMENT OF BASIS AND PURPOSE

This Record of Decision ("ROD") presents the selected remedial actions for the Micro Storage Corporation/Intel Magnetics Superfund sites in Santa Clara, California. This document was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), 42 U.S.C. Section 9601 et. seq., and to the extent practicable the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Section 300 et. seq., ("NCP"). This decision is based on the administrative record for this site.

The State of California concurs with the selected remedy.

3.0 ASSESSMENT OF THE SITE

Actual or threatened release of hazardous substances from these sites, if not addressed by implementing the response action selected in this ROD, may present an imminent and substantial endangerment to public health, welfare, or the environment.

4.0 DESCRIPTION OF THE REMEDY

The remedial actions address the principal threat remaining at the Micro Storage Corporation/Intel Magnetics sites by removing the contaminants from ground water, thereby significantly

reducing the toxicity, mobility or volume of hazardous substances in the media. These response actions will greatly reduce the possibility of contamination of existing potable water supplies and potential future water supplies.

This action represents the final remedial action to remove contaminants from groundwater. The major components of the selected remedy include the following:

a. Continued groundwater extraction until drinking water standards for TCE (5 ppb); 1,1-DCA (5 ppb); 1,1-DCE (4 ppb); cis 1,2-DCE (6 ppb); trans 1,2-DCE (10 ppb); Freon 113 (1200 ppb); Methylene Chloride (40 ppb); PCE (5 ppb); Toluene (100 ppb); 1,1,1-TCA (200 ppb); 1,1,2 TCA (32 ppb); chloroform (100 ppb) are achieved in all combined MSC/IM site monitoring wells.

b. Hydraulic containment of the entire groundwater plume above cleanup standards and continued groundwater extraction at the four existing wells. Modifications to the system is required in the event that the interim hydraulic control system is demonstrated not to be effective in containing and removing the groundwater pollutants.

c. Maintenance of hydraulic control to prohibit the further vertical and horizontal migration of the groundwater pollution. This requirement shall remain in effect until cleanup standards are achieved.

d. Continued quarterly groundwater monitoring at the combined MSC/IM site during the cleanup period. Water samples will continue to be collected to verify that cleanup is proceeding and that there is no migration of VOCs, above cleanup standard levels, beyond current boundaries or into the deeper B zone. The frequency of monitoring will be decreased from quarterly to triannually two years after approval of a report submitted in compliance with Provision C.4.a. (hydraulic control) of the RWQCB Order. The frequency of monitoring will be further decreased to biannually once cleanup standards have been achieved and stabilized for one year. Detailed sampling and reporting requirements for the combined MSC/IM site are contained in the RWQCB's Self-Monitoring Plan.

e. Treatment of extracted groundwater with an existing carbon adsorption system. The treated groundwater will continue to be discharged to Calabazas Creek, pursuant to a NPDES permit.

f. File a deed restriction prohibiting use of on-site shallow groundwater for drinking water and controlling other subsurface activities. The deed restriction shall remain in place until groundwater cleanup standards are achieved.

5.0 STATUTORY DETERMINATIONS

The selected remedy is protective of human health and the environment, complies with federal and State requirements that are legally applicable or relevant and appropriate to the remedial action, and is cost-effective. This remedy utilizes permanent solutions and alternative treatment (or resource recovery) technologies to the maximum extent practicable and satisfies the statutory preference for remedies that employ treatment that reduces toxicity, mobility, or volume as a principal element.

Because the remedy will result in hazardous substances remaining on-site above health-based levels, a five-year review, pursuant to CERCLA Section 121, 42 U.S.C. Section 9621, will be conducted at least once every five years after initiation of the remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment.

John Wise
Deputy Regional Administrator

8.26.91
Date

DECISION SUMMARY

PART II. DECISION SUMMARY

This Decision Summary provides an overview of the problems posed by the Micro Storage Corporation/Intel Magnetics Superfund sites ("the Study Area" or "MSC/IM"), the remedial alternatives, and the analysis of the remedial alternatives. This Decision Summary explains the rationale for the remedy selection and how the selected remedy satisfies the statutory requirements of CERCLA.

1.0 SITE NAME, LOCATION, AND DESCRIPTION

1.1 SITE NAME AND LOCATION

MICRO STORAGE CORPORATION/INTEL MAGNETICS
Former Micro Storage Facility
2986 Oakmead Village Court
Santa Clara, Santa Clara County, CA

Intel Corporation
Former Intel Magnetics Facility
3000 Oakmead Village Drive
Santa Clara, Santa Clara County, CA

The combined Micro Storage Corporation/Intel Magnetics site is located in the City of Santa Clara in a relatively flat lying portion of the Santa Clara Valley approximately 50 miles south of San Francisco (see Figure 1). Ground surface elevations are generally between 35 feet and 41 feet above mean sea level. This is an industrial park setting, dominated by the electronics industry, particularly semiconductor manufacturing. As such, the majority of the area is developed, with large paved areas for streets and parking lots. Surface water is controlled by the storm sewer system which directs runoff to Calabazas Creek. The nearest residential areas are located 1200 feet south of the site. Other residential areas are located 6000 feet north-northeast of the combined Micro Storage Corporation/Intel Magnetics site. None of these residential areas are within the area impacted by the past chemical releases from the combined MSC/IM site.

1.2 REGIONAL TOPOGRAPHY

The Study Area is located near the center of the Santa Clara Valley which extends southeast from San Francisco Bay and is bounded by the Diablo Range on the northeast, and by the Santa Cruz and Gabilan Ranges on the southwest.

The Santa Clara Valley is a large structural depression in the Central Coastal Ranges of California. The Valley is filled with alluvial and fluvial deposits from the adjacent mountain ranges. These deposits are up to 1,500 feet in thickness. At the base of the adjacent mountains, gently sloping alluvial fans of the basin tributaries laterally merge to form an alluvial apron extending into the interior of the basin.

1.3 CLIMATOLOGY

The San Francisco Bay area has pronounced wet and dry seasons with mild wet winters and warm dry summers characteristic of a Mediterranean climate. The Santa Clara Valley lies in the path of winter storms which periodically sweep inland from the North Pacific. Freezing temperatures and snow are extremely rare. Rainfall from the winter storms ranges from moderate to heavy. Records from the Santa Clara Valley Water District show the average annual rainfall to be about 14 inches. The site averages approximately 10 to 14 inches of rainfall per year. Over 75% of the total annual rainfall in this area occurs during the winter months of November through March. The average annual wind speed is approximately 6 to 7 mph (about 3 m/sec) with slightly stronger winds occuring in the summer. Winds in the area are predominantly from the north and northwest.

1.4 ADJACENT AND HISTORICAL LAND USE

Land use in the general vicinity of the site was primarily agricultural until the 1970's when light industrial and commercial development began. The MSC/IM site is located in an industrial park (see Figure 2). The closest residences are approximately one-half mile to the south and one mile to the northwest. Both residential areas contain predominantly single family residences built on concrete slabs. Several elementary schools are included in each of these residential areas. The campus of Mission College is located approximately one mile north of the site. There are no day care centers or convalescent homes located in the immediate vicinity of the site.

1.5 HYDROGEOLOGY

Regional Hydrogeology

The Santa Clara Valley groundwater basin is divided into two broad areas: 1) the forebay, and 2) the confined area, where the combined MSC/IM site is located. The forebay occurs along the elevated edges of the basin where the basin receives its principal recharge. The confined area is located in the flatter interior portion of the basin and is stratified or divided into individual beds separated by significant aquitards. The confined area is divided into the upper and lower aquifer zones. The division is formed by an extensive regional aquitard that occurs

at depths ranging from about 100 feet near the confined area's southern boundary to about 150 to 250 feet in the center of the confined area and beneath San Francisco Bay. Thickness of this regional aquitard varies from about 20 feet to over 100 feet.

Several aquifer systems occur in the upper aquifer zone separated by aquitards which may be leaky or very tight. Groundwater pollution at the combined MSC/IM site is confined to the shallowmost zone within the upper aquifer zone. The lower aquifer zone occurs beneath the practically impermeable regional aquitard. Numerous individual aquifers occur within this predominantly aquitard zone and all groundwater in this zone occurs confined.

Municipal water supply wells are generally perforated in the lower aquifer zone. Perforated intervals in City of Santa Clara water supply wells located within 2 miles of the combined MSC/IM site begin from 250 to 320 feet below ground surface, although sanitary seals are only installed down to 100 feet below ground surface. Currently, the nearest municipal drinking water supply well downgradient of the combined MSC/IM site is the City of Santa Clara's Well No. 33 located 1.8 miles north of the combined MSC/IM site. No contaminants have been found in this well to date.

Site Hydrogeology

Two shallow aquifer zones have been identified beneath the combined MSC/IM site. These shallow aquifer zones are subdivisions of the upper aquifer zone described in the regional hydrogeology section. The shallowest, or A aquifer zone (A zone), has its upper boundary at about 10 feet below ground surface (BGS), and lower boundary about 20 feet BGS. The B aquifer zone (B zone) lies between about 30 and 40 feet BGS. The two zones are separated by a 2 to 10 feet thick aquitard composed of clay to silty sand. It is suspected that hydraulic separation between the two zones is imperfect owing to the discontinuous nature of sediment types. Shallow groundwater flow in the A and B zone, beneath the combined MSC/IM site, is generally to the north-east. This flow regime is consistent with the northerly regional flow towards the San Francisco Bay.

1.6 WATER USE

The combined MSC/IM site overlies the Santa Clara Valley groundwater basin. Groundwater from this basin provides up to 50% of the municipal drinking water for the 1.4 million residents of the Santa Clara Valley. In 1989, groundwater accounted for approximately 128,000 of the 315,000 acre feet of drinking water delivered to Santa Clara Valley Water District customers. Approximately 300,000 people residing within a 3-mile radius of the Study Area depend on local groundwater for drinking purposes.

The existing and potential beneficial uses of the groundwater underlying and adjacent to the combined MSC/IM site include:

a. Industrial process water supply
b. Industrial service water supply
c. Municipal and Domestic water supply
d. Agricultural water supply

Groundwater Conservation

The potentially responsible parties considered the feasibility of reclamation, reuse, or discharge to a publicly owned treatment works in its NPDES permit application dated January 23, 1990. Based on this evaluation, as well as further evaluation in the FS, the Regional Water Quality Control Board (RWQCB) determined that groundwater reclamation, reuse, or discharge to a POTW at the combined MSC/IM site was not feasible.

1.7 SURFACE AND SUBSURFACE STRUCTURES

The one acre site at 2986 Oakmead Village Court is developed with a single story, tilt-top structure. The building is surrounded with concrete or asphaltic pavement. Less than 10% of the property is unpaved and consists of landscaped areas on the borders of the property. Storm drains which discharge to the Calabazas Creek collect storm runoff water from the flat site area.

Chemicals used in on-site processes at Micro Storage were stored in an external shade storage area located on the west side of the building on a concrete platform. Large quantities were contained in 55-gallon drums which were stored on wood pallets inside the shade area. Other chemicals were contained in 5-gallon or less containers which were stored in a metal cabinet inside the shade storage area as well.

The former IM operations were housed at 3000 Oakmead Village Court in a single story structure located on approximately 2 acres of property. Approximately 90% of the site is covered with buildings or pavement. The only unpaved areas are the landscaped areas located on the borders of the facility. Storm drains which discharge to the Calabazas Creek collect storm runoff water from the nearly level site area.

As reported in its response to a facility questionnaire issued by the RWQCB (1982), IM operated a 500-gallon underground waste solvent tank and a 1000-gallon, in-ground, cement-lined acid neutralization system on the site along with associated underground piping. In addition, several shaded exterior storage areas were observed on the southwest side of the building during a site visit in 1989.

The underground storage tank was installed in 1978 and was used to store waste solvents which typically consisted of 70% water, 25% isopropanol, and small amounts of Freon, N-butyl acetate, Hunt Developer, acetone, xylene, and polymer solids. In July 1985, as a result of on-going soil and groundwater contamination studies, Intel removed the solvent tank and installed a new underground 1000-gallon, double-walled stainless steel tank in an adjacent excavation.

The acid neutralization system was installed in 1978. The system consisted of three underground compartments in which a dilute acid waste stream containing hydrochloric, hydrofluoric, acetic, phosphoric, and sulfuric acids was neutralized prior to discharge to the sanitary sewer. According to RWQCB documents approximately 2000 gallons of wastewater was treated per day.

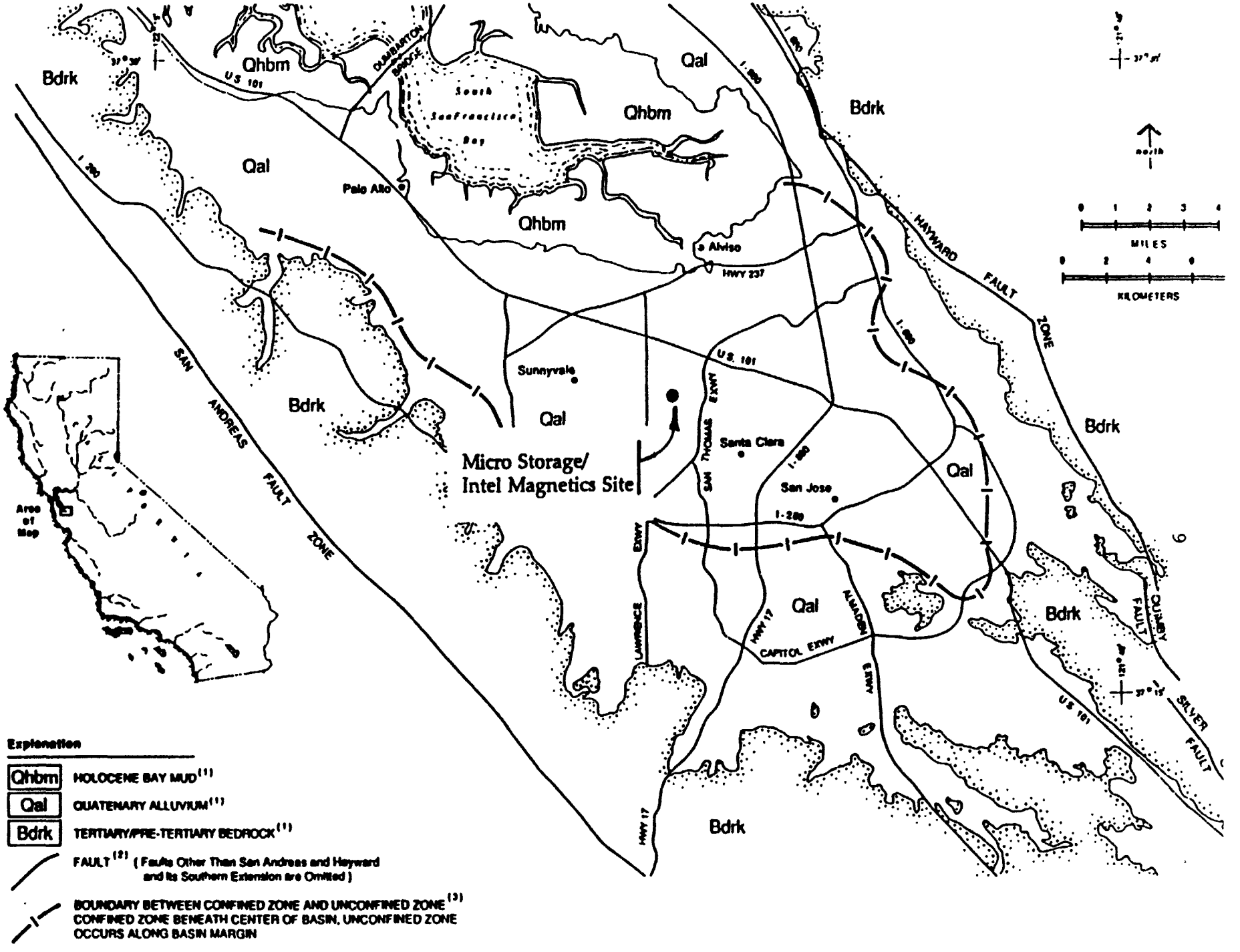
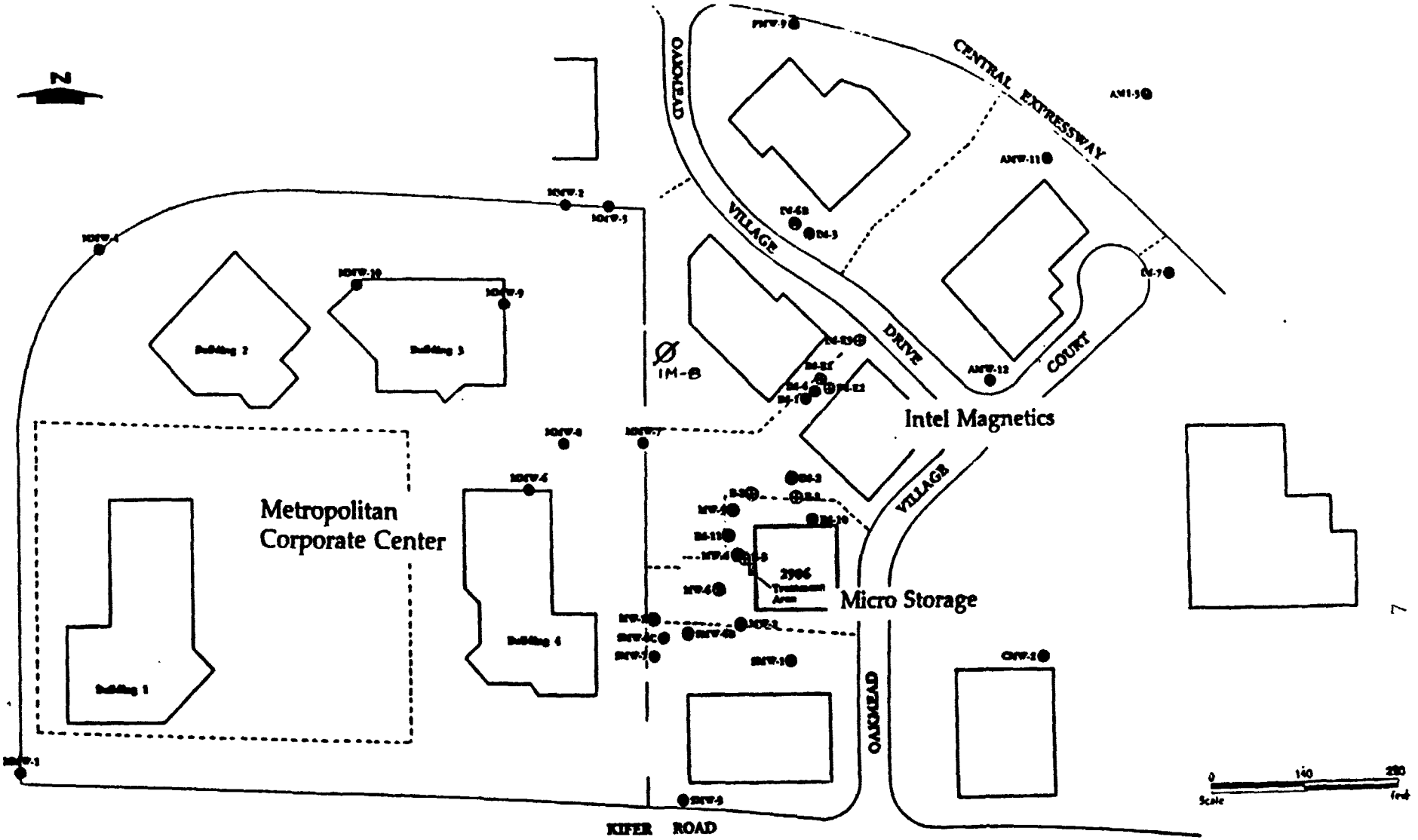


Figure 1. Micro Storage/Intel Magnetics Locality Map



LEGEND

- ● - Approximate location of monitoring well
- ⊕ - Approximate location of extraction well

Figure 2. Micro Storage/Intel Magnetics Site Map

2.0 SITE HISTORY AND ENFORCEMENT ACTIVITIES

2.1 HISTORY OF ENFORCEMENT ACTIONS

Pursuant to the South Bay Multi-Site Cooperative Agreement and the South Bay Ground Water Contamination Enforcement Agreement, entered into on May 2, 1985 (as subsequently amended) by the Regional Water Quality Control Board ("the Board" or "RWQCB"), EPA and the California Department of Health Services (DHS), the Board has been acting as the lead agency for the combined MSC/IM site. The combined MSC/IM site is on the NPL and has been regulated by RWQCB Orders.

Kim Camp III (KCIII) is the property owner of the former Micro Storage Corporation Facility (MSC site) located at 2986 Oakmead Village Court, Santa Clara (Figures 1 and 2). Micro Storage Corporation (MSC) occupied the MSC site from January 1985 to December 1986, and used the MSC site for research and development and pilot manufacturing of microcomputer disk drives. The chemicals used by MSC included Freon 113 and other unspecified nonflammable/chlorinated solvents, which have been found in the groundwater at the MSC site. EPA and RWQCB staff was advised by Counsel for MSC that MSC was dissolved as a corporation by the State of California on August 16, 1988.

3000 Oakmead Village Drive Limited (OVDL) is the property owner of the former Intel Magnetics Facility (IM site) located at 3000 Oakmead Village Drive, Santa Clara. Intel Magnetics (IM), a wholly owned subsidiary of the Intel Corporation (Intel), occupied the IM site from 1978 to 1987, and operated a magnetic bubble production and testing facility at the IM site. An underground solvent tank and an in-ground acid neutralization system were formerly operated by IM at the facility. Chemicals used in IM operations included isopropanol, Freon, chlorinated hydrocarbons (unspecified, but reportedly does not include tetrachloroethene and 1,1,1,-trichloroethane), N-butyl acetate, Hunt Developer (isodecane C_{11} and C_{12}), acetone, xylene, dilute acids, and the metals arsenic, chromium, lead, and tin. Among others, TCA and Freon 113 have been found in the groundwater at the IM site.

The IM site was placed on the National Priority List (NPL) in May 1986. In 1988 the MSC site was included with the IM site as one combined Superfund site. EPA conducted a PRP Search from August 1990 to December 1990 and MSC, Kim Camp III, Kimball Small Investments III, Westall Corporation, Campeau Corporation California, Intel, and Oakmead Village Drive Limited were identified as Potentially Responsible Parties under Federal Superfund (CERCLA/SARA) regulations.

The following is a chronology of important Micro Storage Corporation/Intel Magnetics regulatory activities.

a. June 16, 1982 Intel submits completed Board Facility Questionnaire.

b. March 19, 1986 Board adopted NPDES Permit No. CA0028941 (Order No. 86-014), for the discharge of treated extracted groundwater at the IM site.

c. May 1986 IM site added to the final NPL.

d. February 2, 1987 KCIII submits its tenants' Hazardous Chemical Use History Report. October 12, 1988, EPA changes name of site from IM to the combined MSC/IM site.

d. February 15, 1989 Board adopted Order No. 89-017 issuing Site Cleanup Requirements to MSC and KCIII.

e. March 17, 1989 Board adopted Order No. 89-086 amending Site Cleanup Requirements to MSC, KCIII, Intel, and OVDL (approving RI/FS workplan and rescinding Order No. 89-017).

f. March 21, 1990 Board adopted NPDES Permit No. CA0029670 (Order No. 90-040), for the discharge of treated extracted groundwater at the combined MSC/IM site.

2.2 HISTORY OF SITE INVESTIGATIONS

In early 1982, the Regional Board initiated a leak detection program to define the extent of leakage from underground storage tanks and pipes in the South Bay area. As a result of these efforts, subsurface investigations at the IM site detected trichloroethene (TCE), trichlorethane (TCA), and Freon-113 in the A aquifer zone (the shallowest or first encountered aquifer below the ground surface) at the IM site.

Based on the results from wells installed on the upgradient MSC site, the Board requested that KCIII conduct additional investigation on the MSC site. A September 1988 technical report prepared by Jacobs Engineering, a consulting firm under contract to EPA, concluded that, "A primary source of VOC contamination is indicated at the Micro Storage facility where maximum levels of VOC concentrations including trichloroethylene (TCE), 1,1,1-trichloroethane (TCA), and Freon 1123 are found". The Jacobs Engineering Report also concluded that, "a secondary source of Freon 113 and possibly TCA is believed to exist at the Intel Magnetics site...".

Based on the new information, submitted in late 1987 and early 1988, regarding groundwater pollution at the upgradient MSC site, EPA changed the name of the Superfund site from the Intel

Magnetics site to the combined Micro Storage Corporation/Intel Magnetics site. In making this change, EPA, in an October 12, 1988 letter to Board staff, stated that "Intel is still a responsible party...". Since October 1988, EPA and the Board have regulated the MSC site and the IM site as one combined Superfund site.

In May 1990 the Board adopted Order No.89-086 which approved the Remedial Investigation/Feasibility Study (RI/FS) workplan. Order No. 89-086 was an interim Order which remained in effect while the RI/FS was being completed. The RWQCB adopted Order No. 91-119 on July 17, 1991. This Order requires MSC/IM to implement remedial actions that are equivalent to the remedy chosen in this Record of Decision.

2.3 HISTORY OF SITE ACTIVITIES

Interim Remedial Actions

Interim remedial measures (IRMs) at MSC have included the extraction of contaminated groundwater and the removal of all chemicals stored on the combined MSC/IM site. IRMs at the IM site have included the extraction of polluted groundwater, the replacement of the underground solvent tank and excavation of contaminated soils.

Between 1986 and 1990 Intel extracted and treated groundwater from two IM site wells. The treated water was discharged to a storm sewer system tributary of Calabazas Creek as specified under NPDES Permit #CA0028941.

In January 1991, KCIII began operation of an expanded groundwater extraction and treatment system on the MSC site. This system pumps water from an existing IM site extraction well and three new extraction wells located on the MSC site. The treated water is discharged to a storm sewer system tributary of Calabazas Creek as specified under NPDES Permit #CA0029670.

Metropolitan Corporate Center

A separate VOC groundwater plume has been identified beneath a property located immediately west of the MSC site (see Figure 2). The property, known as the Metropolitan Corporate Center (MCC), is located at 3165 Kifer Road, Santa Clara and owned by the Metropolitan Life Insurance Company (Metropolitan). TCE has been detected in groundwater monitoring wells at levels up to 180 ppb and in reconnaissance groundwater samples at levels up to 400 ppb. To date, no source has been located for the MCC plume. No underground solvent storage tanks are known to have been installed at the MCC property. While the lateral and vertical extent of the MCC plume has not been completely defined, data submitted by both Metropolitan and KCIII indicate that either the

plumes are not commingled or they are only commingled near the lateral leading edge at levels less than approximately 50 ppb total volatile organic compounds.

The RWQCB issued Site Cleanup Requirements under Order No. 91-100 on June 19, 1991 to Metropolitan for the MCC. Because the MCC plume and the MSC/IM plume are in close proximity to each other, Provision 2 of both the MCC Order and the Site Cleanup Requirement Order for this site (Order No. 91-119) require that the operation of any extraction system at the MCC and MSC/IM sites be done in a coordinated effort. This coordinated effort includes locating extraction wells and selecting pumping rates that maximize pollutant removal and minimize the hydraulic effects on the other site's groundwater plume.

3.0 COMMUNITY RELATIONS

An aggressive Community Relations program has been ongoing for all Santa Clara Valley Superfund sites, including the combined MSC/IM site, and the requirements for public participation under CERCLA Section 113(k)(2)(B)(i-v) have been met. The RI/FS and Proposed Plan for Micro Storage Corporation/Intel Magnetics was released to the public in April 1991. These two documents were made available to the public in both the administrative record and an information repository maintained at the RWQCB offices in Oakland, CA and the Santa Clara Public Library. The RWQCB published a notice in the Santa Clara Weekly on April 10, 1991 and April 17, 1991, announcing the RI/FS, Proposed Plan and opportunity for public comment at the Board Hearing of April 17, 1991 in Oakland, and announcing the opportunity for public comment at an evening public meeting at Bracher Elementary School in the City of Santa Clara on April 24, 1991. A sixty day public comment period on the RI/FS Report and the Proposed Plan ran from April 17, 1991 to June 17, 1991. A presentation of the proposed final cleanup plan was made at the April 17, 1991 Board Hearing and the April 24th public meeting. Representatives from the RWQCB and EPA attended the meeting. The RWQCB staff person answered questions about problems at the site and the remedial alternatives under consideration. A response to the comments received during this period is included in the Responsiveness Summary, which is part of this Record of Decision.

Fact Sheets for the combined MSC/IM site were mailed to interested residents, local government officials, and media representatives. Fact Sheet 1, mailed in January 1990, summarized the pollution problem, the results of investigations to date, and the interim remedial actions. Fact Sheet 2, mailed in April 1991, described the cleanup alternatives evaluated, explained the proposed final cleanup plan, announced opportunities for public comment at the Board Hearing of April 17, 1991 in Oakland and the Public Meeting of April 24, 1991 in Santa Clara and described the availability of further information at the Information Repository at the City of Santa Clara Public Library.

This decision document presents the selected remedial action for the Micro Storage Corporation/ Intel Magnetics Site, in Santa Clara, California chosen in accordance with CERCLA, as amended by SARA and, to the extent practicable, the National Contingency Plan. The decision for this site is based on the administrative record.

4.0 SCOPE AND ROLE OF THE RESPONSE ACTION

This ROD addresses the entire site which consists of contamination of the groundwater aquifer. The purpose of this response is to prevent any further migration of contaminants in the groundwater, prevent any future exposure to the public of contaminated groundwater, and to restore the A-zone groundwater to drinking water quality. The response action does not address soils because investigations have not demonstrated that soils contain contaminants at levels of concern.

For the site, twelve chemicals have been identified as the primary contaminants of concern in the groundwater. Cleanup standards have been assigned to all twelve chemicals. The highest concentrations of contaminants in the A-zone groundwater are: TCE (770 ug/l), TCA (570 ug/l), and Freon(3,400 ug/l). DCA, DCE, and PCE have also been detected in smaller concentrations.

The selected remedy presented herein addresses the documented potential threats from the site. Treatment of the contaminated groundwater will significantly reduce the possibility of future migration of contaminants into a potential drinking water source. The groundwater cleanup standards for the combined MSC/IM site are based on Environmental Protection Agency (EPA) maximum contaminant levels (MCLs), California Department of Health Services (DHS) MCLs (proposed or adopted), and DHS Action Levels. The cleanup standards are defined in Table 4.1.

As shown on Table 4.1, the groundwater cleanup standards for all contaminants except benzene and 1,1 DCE are Federal or State (MCLs), either adopted or proposed, whichever is more stringent. The cleanup standard for 1,1 DCE is less than its proposed or adopted MCL. This reduction was necessary so that the cumulative risk associated with the cleanup standards would be within acceptable levels. The final cleanup standards for the suite of chemicals detected in the shallow zone equate to a future use scenario and carcinogenic risk level for groundwater ingestion and inhalation of 1×10^{-4}.

SOIL CONTAMINATION

The final Remedial Investigation report concluded that the volatile organic contaminants (VOCs) detected in the soil represent a limited release confined to the small area of the parking lot near the former storage area. There are currently no ARARs established for cleanup levels in contaminated soil. However, a RWQCB policy of cleanup to background or 1 ppm total VOCs for soils is a TBC criteria and has been set as the soil cleanup standard. Experience at other sites has shown that this level

will prevent recontamination of groundwater. Current soil conditions are two orders of magnitude below 1 ppm. Because of this low level, remedial actions for soil were not developed.

GROUNDWATER CONTAMINATION

Contaminated groundwater extends in a northeasternly direction along the approximate hydraulic gradient of the A-zone potentiometric surface. The plume's center is currently located near the northern property boundary of 2986 Oakmead Village Court and impacts approximately 10,000 cubic yards of aquifer material. The combined plume is approximately 850 feet in length and 450 feet in width at its widest point, and occupies an approximate aquifer volume of 93,000 cubic yards.

TABLE 4.1

GROUNDWATER CLEANUP STANDARDS
GROUNDWATER SELF-MONITORING PROGRAM

The Combined Micro Storage/Intel Magnetics Site
2986 Oakmead Village Court and 3000 Oakmead Village Drive
Santa Clara, Santa Clara County

(all values in μg/l)

Compound	FEDERAL MCLG	FEDERAL MCL	CA ACTION LEVEL	CA MCL	CLEANUP STANDARD
Benzene	0	5	--	1	1
1,1-Dichloroethane	--	--	--	5	5
cis 1,2-Dichloroethene	70	70	--	6	6
trans 1,2-Dichloroethene	100	100	--	10	10
1,1-Dichloroethene	7	7	--	6	4
Freon 113	--	--	--	1200	1200
Methylene Chloride	(0)	(5)	40	--	40
Tetrachlorothene	0	5	--	5	5
Toluene	1000 (40)PS	1000	100	--	100
1,1,1 - Trichloroethane	200	200	--	200	200
1,1,2 - Trichloroethane	--	--	--	32	32
Trichloroethene	0	5	--	5	5

MCLG Maximum Contaminant Level Goal
MCL Maximum Contaminant Level
PS Proposed Secondary MCL
() criteria in parentheses are proposed MCLs
-- no criteria

5.0 SUMMARY OF SITE CHARACTERISTICS

5.1 SOURCES OF CONTAMINATION

Source Investigation

The RI identified two potential source areas for the groundwater pollution: 1) a 500 gallon underground storage tank located on the IM site, and 2) an above ground outdoor chemical storage area located on the MSC site.

Intel Source Investigation

A secondary source of groundwater pollution is associated with the former underground waste solvent storage tank at IM. In response to the RWQCB 1982 questionnaire, Intel described the tank as a non-vaulted steel tank with a capacity of 400 gallons. The tank was reportedly used to store approximately 350 gallons of solvents per month. At a meeting between the RWQCB and Intel in August, 1983, the RWQCB concluded that the contamination at the site was the result of an overflowing tank (EPA Responsible Party Search report dated August 28, 1985). The overflowing fluid would have seeped into the gravel backfill that surrounded the tank. In July 1985, the tank and 35 cubic yards of soil were excavated from the IM site. The tank was reportedly tested both in the ground and after its removal and found to not have any leaks. The chemicals used by IM included TCA and Freon 113.

MSC Source Investigation

No discrete source of the groundwater contamination has been positively located at MSC. No underground tanks, sumps, or piping (except piping for water, natural gas, electrical or domestic sewage) are known to have been installed at the Micro Storage property. However, Micro Storage reported that they did store chemicals in 55 gallon drums in an external above-ground storage area. The chemicals used by Micro Storage included Freon-113 and other unspecified nonflammable chlorinated solvents.

Currently, the highest levels of groundwater contaminantion are beneath the parking lot of the MSC site. Vadose zone sources generally overlie the area of highest groundwater pollution. In an attempt to characterize the soil pollution at the MSC site, KCIII collected and analyzed 37 shallow soil samples collected from 17 borings. In addition, 70 soil gas samples were collected during three soil gas surveys. Normally these 107 data points would be considered sufficient for characterizing an area of this size (approximately 1 acre). However, confirmation soil and soil

gas sampling has yielded contradictory results. For example, the soil samples collected in June 1988 contained an average of approximately 120,000 parts per billion (ppb), Freon-113. Confirmation soil samples collected in 1989 and 1990 contained a maximum of 6.4 ppb Freon-113. Similar contradictions are also noted in the soil gas survey. For example, SG-10 (collected in October 1987) contained 84 ppb Freon-113. Confirmation soil gas sampling at SG-59 (collected in April 1989) contained 2270 ppb Freon-113.

While some of the data was contradictory, the majority of the data supports the conclusions presented in the RI that the VOCs detected represent a limited release confined to the parking lot near the former storage area. Soil, soil-gas and groundwater data suggests that the original source of VOCs has leached or volatilized out of the source area and that only low levels of VOCs remain. These low levels are not prone to impacting the groundwater, and no further soil action is recommended.

Vertical Conduit Study

A well search for abandoned agricultural wells within 1/2 mile radius of the combined MSC/IM site was completed in August 1989. The focus of the well search was to identify wells that potentially may form migration pathways to the deeper aquifer. This study also evaluated whether existing monitoring wells could provide a conduit between the polluted A zone and the clean B zone. The study identified three former agricultural wells (06S1W28K02, 06S1W28K03, and 06S1W28K05) located approximately 750-1000 feet northeast of the leading edge of the plume. Well 06S1W28K05 was subsequently destroyed by Avantek Inc. in 1990. No well destruction information was available on the other two wells. Since these wells lie over 750 feet beyond the leading edge of the plume, no further work was required.

The vertical conduit study also determined that four existing monitoring wells had the potential to cross contaminate the B zone. These four wells (IM-5, 6, 8, and 9) were properly destroyed in 1990.

5.2 DESCRIPTION OF CONTAMINATION

As a result of subsurface investigations, IM detected trichloroethene (TCE), trichlorethane (TCA), 1,1 dichloroethene (1,1 DCE), and Freon-113 in the A aquifer zone which is the shallowest or first encountered aquifer below the ground surface.

The RI used data from twenty-nine A and B zone monitoring and extraction wells in an attempt to define the vertical and horizontal extent of the plume (see Figures 5.1 and 5.2). The A zone plume covers an area approximately 850 long feet by 450 feet wide. With the exception of monitoring well MMW-2, only one B

zone sample has shown a trace level of pollution during the last four years. This trace level is likely due to laboratory contamination. Monitoring well MMW-2 appears to be screened across both the A and B aquifers. In 1990, MMW-2 had an average concentration of TCE of 32 ppb. Board Order No. 91-100 requires Metropolitan Life Insurance Company to consider replacing MMW-2 with a mono-aquifer screened well and properly destroy MMW-2.

Table 5.3 provides geometric means of concentrations of chemicals detected in A-zone groundwater, maximum contaminant concentrations and frequency of detection. Based on data from the April 1991 sampling round, the only chemicals detected in the A zone above drinking water standards were TCE, 1,1-DCE, 1,2-DCE, and Freon-113 at maximum levels of 750, 13, 43, and 3500 parts per billion (ppb) respectively.

5.3 CONCLUSION

EPA expects that up to 20,000 gallons (15 gpm pumping rate) of contaminated groundwater may need to be treated each day for approximately 10 years. Groundwater treatment remedies should be adequate to prevent surface water releases and a surface water remedy is not proposed at this time.

All data used to develop the Feasibility Study, to select remedial alternatives and to develop conclusions and clean-up standards presented in this Record of Decision were based on the following data quality requirements:

1) All data were collected under the guidance of a Quality Assurance Project Plan developed under EPA protocols and reviewed and approved by EPA Quality Assurance Management staff.

2) All data were collected in accordance with procedures presented in an approved Sampling and Analysis Plan. The Sampling and Analysis Plan was developed in accordance with EPA Region 9 guidance and were reviewed and approved by EPA Quality Assurance Management staff.

3) Random sample splits were collected by Board staff to confirm the validity of data generated by Intel and KCIII.

4) Selected data was validated by the Department of Health Services and found to be qualitatively and quantitatively acceptable.

5) There has been reasonable repeatability of the data based on six years of monitoring.

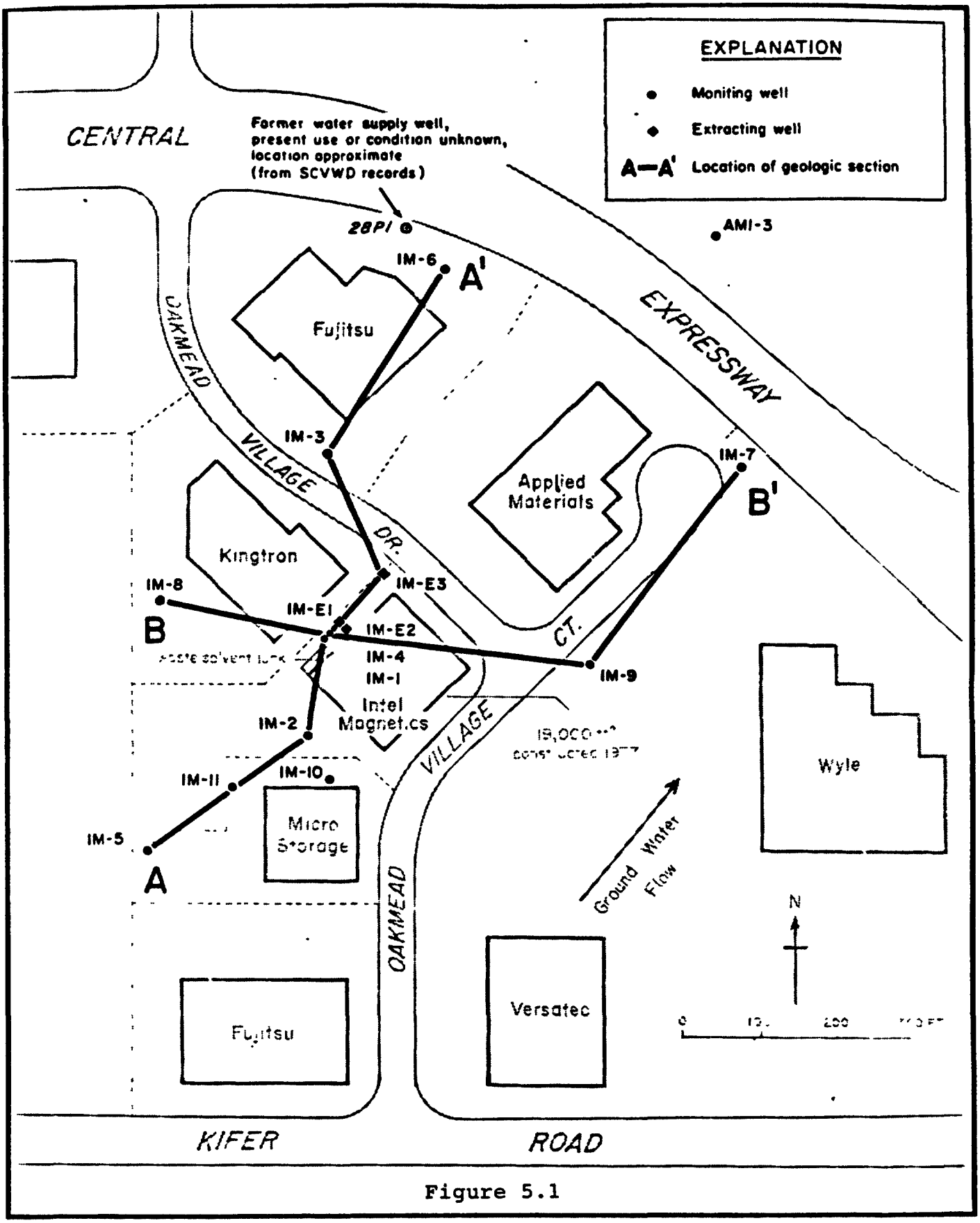
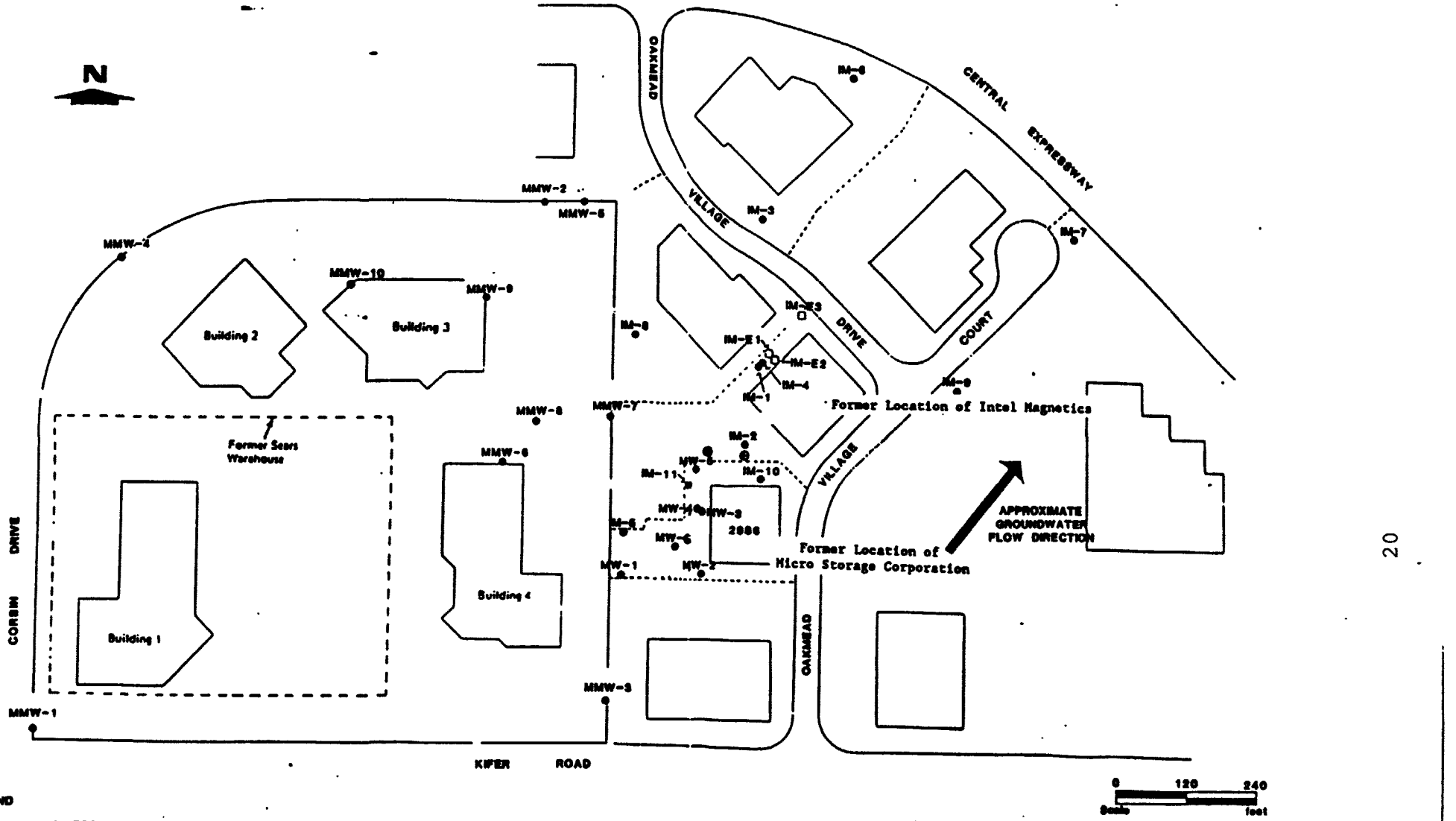


Figure 5.1

Well and Geologic Cross-Section Location Map



LEGEND

- ● - MONITORING WELL
- □ - EXTRACTION WELL
- ● - PROPOSED EXTRACTION WELL
- ------ - PROPERTY BOUNDARY

J.V. LOWNEY & ASSOCIATES
ENVIRONMENTAL/GEOTECHNICAL CONSULTANTS

SITE VICINITY, MONITORING/EXTRACTION WELL LOCATIONS

2986 OAKMEAD VILLAGE COURT
Santa Clara, California

PROJECT NO.	DATE
587-21	September 1989

FIGURE 5.2

TABLE 5.3

CONCENTRATIONS OF CHEMICALS DETECTED IN GROUNDWATER SAMPLES
A-ZONE

MICRO STORAGE/INTEL MAGNETICS
SANTA CLARA, CALIFORNIA

CHEMICAL	GEOMETRIC MEAN [a,b] (μg/liter)	MAXIMUM CONC. (μg/liter)	FREQUENCY OF DETECTION	LOCATION OF MAXIMUM
Bromodichloromethane	NA	2.2	1/1	IM-E2
Chloroform	0.50	3.7	11/11	IM-E1
1,1-Dichloroethane	1.2	22	141/255	IM-6
1,2-Dichloroethane	1.8	18	8/241	IM-5
1,1-Dichloroethene	4.6	46	151/257	IM-11
1,2-Dichloroethene (trans)	8.4	34	2/5	MW-4
1,2-Dichloroethene (cis/trans)	3.6	69	130/251	IM-11
Difluoromethane	NA	1.3	1/1	IM-10
Ethylbenzene	NA	1.1	1/11	MW-2
Freon (Freon 113 & Freon 11)	51	8,200	160/242	IM-10
Freon 11	NA	7.9	1/14	IM-10
Freon 12	NA	2.8	1/1	IM-E2
Freon 13	NA	3,400	1/2	MW-3
Freon 113	53	1,300	6/6	MW-3
Freon 123	3.1	50	79/79	IM-2
Methylene chloride	22	90	3/17	IM-E1
Tetrachloroethene	1.4	28	40/48	MW-3
Toluene	6.4	29	2/11	MW-3
1,1,1-Trichloroethane	15	570	198/258	MW-3
1,1,2-Trichloroethane	0.20	0.50	2/16	IM-10
Trichloroethene	32	770	169/256	IM-11

[a] Geometric mean of detects only.
[b] NA = Geometric mean not calculated when chemical detected once.
All values are rounded to two significant figures.

6.0 SUMMARY OF SITE RISKS

6.1 CONTAMINANT IDENTIFICATION

Twelve chemicals of potential concern were identified within the Study Area. The twelve chemicals are as follows:

chloroform
1,1-dichloroethane (1,1-DCA)
cis 1,2-dichloroethene (cis 1,2-DCE)
trans 1,2-dichloroethene (trans 1,2-DCE)
1,1 dichloroethene (1,1-DCE)
1,1,2-trichloro-1,2,2-trifluroethane (Freon 113)
methylene chloride
tetrachloroethylene (PCE)
toluene
1,1,1-trichloroethane (1,1,1-TCA)
1,1,2-trichloroethane (1,1,2-TCA)
trichloroethylene (TCE)

The reasons for selecting the listed chemicals as indicator chemicals are as follows:

1. Each of the indicator chemicals was consistently detected in the samples throughout the plume area. Table 6.1 lists detection freqencies for these compounds.

2. Each of the indicator chemicals possesses physiochemical properties (relatively high water solubility and relatively low soil sorption) which tend to promote their dispersion in ground water. Toluene has a relatively low soil sorption coefficient, therefore, has the potential to leach from soil into ground-water. In addition, they are all quite volatile and can easily escape into soil gas or the atmosphere. Table 6.2 provides physical/chemical properties for the chemicals of concern.

3. Most of the indicator chemicals are potential carcinogens. TCE, PCE and 1,1-DCA were identified by EPA as probable human carcinogens (Group B2) based on available laboratory animal data. 1,1-DCE was identified by EPA as a possible human carcinogen (Group C) based on available laboratory animal data. TCA remains unclassified as a potential carcinogen because there is inadequate evidence of its carcinogenicity in animal studies. Freon 113 and cis 1,2-DCE are noncarcinogens.

4. The 1,1-DCA is a potential breakdown product of the major plume contaminant, 1,1,1-TCA. The most common plume contaminant, TCE, breaks down into DCE and ultimately vinyl chloride which has not been detected at this site.

EXPOSURE ASSESSMENT

Potential environmental pathways include those related to contaminated groundwater. Potential human exposures to contaminants include ingestion of and direct contact with groundwater, and inhalation of volatilized contaminants during showering by area residents. Residential areas are located 1200 feet south of the site and 6000 feet north-northeast of the site. Table 6.3 and 6.4 provide a summary of the human exposure pathways under current and future use conditions.

The primary route of exposure is to people working at or near the facility. Currently, chemicals in the groundwater do not contact human or environmental receptors. There are no surface water bodies in the immediate vicinity of the facility, and there are no drinking water supply wells within or near the Micro Storage/Intel Magnetics facility. A municipal water system supplies water to businesses and residents. Future exposure could only occur during excavation of the site or if a shallow drinking water well was installed.

TOXICITY ASSESSMENT

Reference doses (RfDs) have been developed by EPA for indicating the potential for adverse health effects from exposure to chemicals exhibiting noncarcinogenic effects. RfDs, which are expressed in units of mg/kg-day, are estimates of lifetime daily exposure levels for humans, including sensitive individuals. Estimated intakes of chemicals from environmental media (e.g., the amount of a chemical ingested from contaminated drinking water) can be compared to the RfD. RfDs are derived from human epidemiological studies or animal studies to which uncertainty factors have been applied (e.g., to account for the use of animal data to predict effects on humans). These uncertainty factors help ensure that the RfDs will not underestimate the potential for adverse noncarcinogenic effects to occur.

Cancer potency factors (CPFs) have been developed by EPA's Carcinogenic Assessment Group for estimating excess lifetime cancer risks associated with exposure to potentially carcinogenic chemicals. CPFs, which are expressed in units of $(mg/kg\text{-}day)^{-1}$, are multiplied by the estimated intake of a potential carcinogen, in mg/kg-day, to provide an upper-bound estimate of the excess lifetime cancer risk associated with exposure at that intake level. The term "upper bound" reflects the conservative estimate of the risks calculated from the CPF. Use of this approach makes

underestimation of the actual cancer risk highly unlikely. Cancer potency factors are derived from the results of human epidemiological studies or chronic animal bioassays to which animal-to-human extrapolation and uncertainty factors have been applied.

EPA also assigns weight-of-evidence classifications to potential carcinogens. Under this system, chemicals are classified as either Group A, Group B1, Group B2, Group C, Group D, or Group E. Group A chemicals (known human carcinogens) are agents for which there is sufficient evidence to support the causal association between exposure to the agents in humans and cancer. Groups B1 and B2 chemicals (probable human carcinogens) are agents for which there is limited (B1), or inadequate (B2) evidence of carcinogenicity from human studies, but for which there is sufficient evidence of carcinogenicity from animal studies. Group C chemicals (possible human carcinogens) are agents for which there is limited evidence of carcinogenicity in animals, and Group D chemicals (not classified as to human carcinogenicity) are agents with inadequate human and animal evidence of carcinogenicity or for which no data are available. Group E chemicals (evidence of noncarcinogenicity in humans) are agents for which there is no evidence of carcinogenicity in adequate human or animal studies. Several of the chemicals of concern at the MSC/IM site have been classified in Group B2 (chloroform, 1,1-DCA, methylene chloride, tetrachloroethene, and trichloroethene) and benzene has been classified in Group A.

Tables 6.5 and 6.6 contain reference doses, cancer potency factors, and weight of evidence for site chemicals.

6.2 RISK CHARACTERIZATION

A Baseline Public Health Evaluation (BPHE) dated May 1, 1990, was prepared by Clement Associates Inc. under contract to the Board. The BPHE was conducted to evaluate current and potential future health risks posed by the combined MSC/IM site. Since the shallow zone groundwater from beneath the combined MSC/IM site is not currently used for drinking water supply, no current risk was identified at the combined MSC/IM site. Potential future health risks are based on exposures that could occur in the future if untreated shallow zone groundwater was used for human consumption and residential development occurred on the combined MSC/IM site. To ensure that human health is protected, the BPHE incorporated conservative assumptions. Therefore, it is unlikely that the actual risks posed by the combined MSC/IM site in the future would be greater than estimated. Average case and maximum case scenarios are presented in the BPHE. The information below refers to the maximum case scenarios using a 30 year exposure duration.

Excess lifetime cancer risks are determined by multiplying the intake level with the cancer potency factor. These risks are probabilities that are generally expressed in scientific

notation(e.g., 1 x 10^{-6} or 1E-6). An excess lifetime cancer risk of 1 x 10^{-6} indicates that, as a plausible upper bound, an individual has a one in one million chance of developing cancer as a result of site-related exposure to a carcinogen over a 70-year lifetime under the specific exposure conditions at a site.

Potential concern for noncarcinogenic effects of a single contaminant in a single medium is expressed as the hazard quotient (HQ) (or the ratio of the estimated intake derived from the contaminant concentration in a given medium to the contaminant's reference dose). By adding the HQs for all contaminants within a medium or across all media to which a given population may reasonably be exposed, the Hazard Index (HI) can be generated. The HI provides a useful reference point for gauging the potential significance of multiple contaminant exposures within a single medium or across media.

Using the above hypothetical scenario of future groundwater use, the carcinogenic risk from ingestion and inhalation of VOCs at the MSC/IM site is 1 x 10^{-3}. A carcinogenic risk of 1 x 10^{-3} is equal to one excess occurrence of cancer in a population of 1000. EPA's acceptable carcinogenic risk range for cleanup standards selected for a site is 10^{-4} (1 in 10,000) to 10^{-6} (1 in 1,000,000).

Using the same scenario, the noncarcinogenic Hazard Index for ingestion and inhalation of VOCs from the use of shallow groundwater is 5.0. If the noncarcinogenic Hazard Index is less than one, EPA considers the combined intake of chemicals unlikely to pose a health risk. Table 6.7 provides calculations of risks associated with the future-use scenario.

Thus the carcinogenic risk and Hazard Index associated with a "no action" remedy exceed EPA's acceptable carcinogenic risk and Hazard Index range. Table 6.8 provides the calculation of the carcinogenic risk based on clean-up standards, and Table 6.9 depicts the hazard index for noncarcinogens.

The carcinogenic risk at the cleanup standards (chemicals listed on Table 6.8) associated with the potential future use scenario of groundwater ingestion and inhalation of VOCs from groundwater, using the maximum exposure scenario is 1 x 10^{-4}. In cleaning up TCE to the 5 ppb cleanup standard it is quite likely that the concentrations of other VOCs will be reduced to levels below the 5 ppb range. The carcinogenic risk for TCE alone is 1.5 x 10^{-6}. These risks were calculated using a potential future use scenario with a 30 year duration exposure per EPA guidance.

The noncarcinogen Hazard Index associated with the cleanup standards is 0.38. The selected remedy is protective of human health and the environment -- as required by Section 121 of CERCLA -- in that pollution in groundwater is treated to at least MCLs and falls within EPA's acceptable carcinogenic risk range (10^{-6} to 10^{-4}) and noncarcinogenic Hazard Index of less than one.

As shown on Table 4.1, the groundwater cleanup standards for all contaminants, except 1,1 DCE are Federal or State (MCLs), either adopted or proposed, whichever is more stringent. The cleanup standard for 1,1 DCE is less than its proposed or adopted MCLs. This reduction was necessary so that the cumulative risk associated with the cleanup standards would be within acceptable levels. The final cleanup standards for the suite of chemicals detected in the shallow zone equate to a future use scenario carcinogenic risk level for groundwater ingestion and inhalation of VOCs of 1×10^{-4}

6.3 PRESENCE OF SENSITIVE HUMAN POPULATIONS

In order for a chemical to pose a human health risk, a complete exposure pathway must be identified. The greatest potential for exposure to chemicals at the site would be from residential uses. The BPHE did not identify potential exposure pathways under current land use conditions and did not identify sensitive human populations. The closest residences are approximately one-half mile to the south and one mile to the northwest. Although several elementary schools are included in each of these residential areas, the closest school is Bracher Elementary School (grades K-5, approximately 440 students) which is located at 2700 Chromite Drive. There are no day care centers or convalescent homes located in the immediate vicinity of the site.

6.4 PRESENCE OF SENSITIVE ECOLOGICAL SYSTEMS

Two endangered species are reported to use South San Francisco Bay, located approximately 11 miles northwest of the Study Area. The California clapper rail and the salt marsh harvest mouse are reported to exist in the tidal marshes of the Bay and bayshore. The endangered California brown pelican is occasionally seen in the Bay Area, but does not nest in the South Bay. Ranges of the endangered American peregrine falcon and southern bald eagle include the Bay Area. The southern bald eagle does not use bay and bayshore habitats, but the perigrine falcon has started to make a comeback at some northern locations in San Francisco Bay.

The combined MSC/IM site is located near the geographic center of the City of Santa Clara, in a commercial-light industrial setting. No parks or surface water are adjacent to the site, and over 80% of the property is covered with blacktop or a building slab. Chemical constituents are only present in the shallow groundwater. Therefore, the Study Area does not constitute critical habitat for endangered species nor does it include or impact any "wetlands."

6.5 CONCLUSION

Actual or threatened releases of hazardous substances from the Micro Storage/Intel Magnetics Superfund site, if not addressed by implementing the response action selected in this ROD may present an imminent and substantial endangerment to the public health, welfare or environment. Based on the fact that a variety of the VOCs detected in the Study Area pose significant health risks as carcinogens or as noncarcinogens and complete exposure pathways exist, EPA has determined that remediation is warranted.

TABLE 6-1

SELECTION OF CHEMICALS OF POTENTIAL CONCERN FOR ORGANIC CHEMICALS IN GROUNDWATER

MICRO STORAGE/INTEL MAGNETICS
SANTA CLARA, CALIFORNIA

CHEMICAL	FREQUENCY OF DETECTION	MAXIMUM CONCENTRATION (µg/liter)	SELECTED (Y/N)	COMMENT
Bromodichloromethane	1/1	2.2	N	Professional Judgement
Chloroform	11/11	3.7	Y	Potential carcinogen
1,1-Dichloroethane	141/255	22	Y	Frequency > 5%
1,2-Dichloroethane	8/241	18	N	Frequency < 5%
1,1-Dichloroethene	151/257	46	Y	Frequency > 5%
1,2-Dichloroethene (trans)	2/5	34	Y	1,2-Dichloroethene (cis/trans) selected
1,2-Dichloroethene (cis/trans)	130/251	69	Y	Frequency > 5%
Difluoromethane	1/1	1.3	N	Professional Judgement
Ethylbenzene	1/11	1.1	N	Professional Judgement
Freon (Freon 113 & Freon 11)	160/242	8,200	Y	Frequency > 5%
Freon 11	1/14	7.9	Y	Freon selected
Freon 12	1/1	2.8	N	Professional Judgement
Freon 13	1/2	3,400	N	Professional Judgement
Freon 113	6/6	1,300	Y	Freon selected
Freon 123	79/79	50	Y	Frequency > 5%
Methylene chloride	3/17	90	Y	Potential carcinogen
Tetrachloroethene	40/48	28	Y	Frequency > 5%
Toluene	2/11	29	Y	Used in on-site processes
1,1,1-Trichloroethane	198/258	570	Y	Frequency > 5%
1,1,2-Trichloroethane	2/16	0.50	Y	Potential carcinogen
Trichloroethene	169/256	770	Y	Frequency > 5%

Table 6-2

Physical/Chemical Properties of the Organic Chemicals of Potential Concern

	Molecular Weight (g/mol)	Water Solubility (mg/l)	Sol. Ref.	Vapor Pressure (mm Hg)	VP Ref.	Henry's Law Constant (atm-m3/mole)	HL Ref.	--Partition Coefficients-- Soil Organic Carbon (log Koc)	Koc Ref.	Octanol-Water (log Kow)	Log Kow Ref.	Density (g/m3)	Dens. Ref.
Chlorinated aliphatic hydrocarbons													
Chloroform	119.0	8,200	A	1.51E+02	B	3.80E-03	C	1.49	D	1.97	E	1.48	F
1,1-Dichloroethane	98.9	55,000	I	1.82E+03	I	5.70E-03	C	0.48	H	1.79	I	1.18	G
1,1-Dichloroethene	96.9	2,250	AB	5.91E+02	G	1.50E-01	C	1.81	H	1.84	AB	1.22	L
1,2-Dichloroethene (cis)	96.9	3,500	AC	2.08E+02	AC	6.60E-03	C	1.77	H	2.06	K	1.23	L
1,2-Dichloroethene (trans)	96.9	6,300	J	3.24E+02	J	6.56E-03	C	1.77	H	2.09	K	1.23	L
Freon 11	137.4	1,100	H	6.67E+02	H	5.83E+02	R	2.20	H	2.53	S	NA	NA
Freon 113	187.4	170	K	2.70E+02	G	3.90E-01	V	2.41	D	2.00	G	1.50	G
Freon 123	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene chloride	84.9	20,000	M	3.62E+02	N	2.60E-03	C	0.94	H	1.30	O	1.33	L
Tetrachloroethene	165.9	150	G	1.78E+01	P	2.30E-02	C	2.56	H	2.60	P	1.62	G
1,2,4-Trichlorobenzene	181.5	30	AA	2.90E-01	H	2.31E-03	R	3.96	H	4.30	AA	1.46	F
1,1,1-Trichloroethane	133.4	1,330	Q	1.23E+02	Q	2.80E-02	C	2.18	H	2.50	H	1.34	L
1,1,2-Trichloroethane	133.4	4,500	W	3.00E+01	W	1.20E-03	C	1.74	H	2.47	W	NA	NA
Trichloroethene	131.3	1,100	G	5.79E+01	C	8.90E-03	C	2.10	H	2.38	E	1.46	L
Monocyclic aromatic hydrocarbons													
Benzene	78.0	1,750	T	9.52E+01	T	5.59E-03	C	1.92	D	2.12	T	0.88	L
Toluene	92.2	535	G	2.81E+01	U	6.60E-03	C	2.48	H	2.73	U	0.89	L

NA: Not Available

SOURCES FOR PHYSICAL/CHEMICAL PROPERTIES ARE ON THE NEXT PAGE

TABLE 6-3

HUMAN EXPOSURE PATHWAYS FOR MICRO STORAGE/INTEL MAGNETICS
UNDER CURRENT-USE CONDITIONS

Environmental Media	Exposure Point	Potential Receptors	Route of Exposure	Pathway Complete?
Surface Soil	MS/IM Site	None	Direct contact, and inhalation of airborne particulates.	No. The site is currently paved. Therefore, direct contact with contaminated soils and generation of airborne particulates are unlikely. Not evaluated at MS/IM site.
Groundwater	MS/IM Site	None	Ingestion, and inhalation of volatile chemicals released from groundwater during indoor use.	No. Shallow groundwater in the A- and B-zones is not used for drinking. Not evaluated at MS/IM site.
Surface Water	Calabazas Creek	None	Direct contact with contaminated surface waters.	No. Intel releases its treated effluent under an NPDES permit to a storm drain which discharges to the Calabazas Creek. Since this is a permitted release, it is outside the scope of this assessment. Not evaluated at MS/IM site.

Table continued on next page.

TABLE 6-3 (CONTINUED)
HUMAN EXPOSURE PATHWAYS FOR MICRO STORAGE/INTEL MAGNETICS
UNDER CURRENT-USE CONDITIONS

Environmental Media	Exposure Point	Potential Receptors	Route of Exposure	Pathway Complete?
Air	Off-Site Residences	None	Inhalation of volatile chemicals released from groundwater.	No. The groundwater plume in the A-zone extends off the site predominantly beneath pavement and industrial buildings. The plume does not extend beneath residences and, therefore, will not be evaluated at MS/IM site.
Air	Off-Site Residences	None	Inhalation of volatile chemicals released from subsurface soils.	No. If volatile organic chemicals volatilized from on-site subsurface soils on site, it is unlikely that detectable concentrations would be contained in ambient air of off-site residents located 0.5 to 1 mile from the MS/IM site.

TABLE 6-4

HUMAN EXPOSURE PATHWAYS FOR MICRO STORAGE/INTEL MAGNETICS
UNDER FUTURE-USE CONDITIONS

Environmental Media	Exposure Point	Potential Receptors	Route of Exposure	Pathway Complete?
Surface Soil	MS/IM Site	On-Site Residents	Direct Contact.	Yes. Inorganics and semi-volatile organics may persist in soils but inadequate data are available to quantitatively evaluate pathways. Volatile organic chemicals are not anticipated to have a long residence time in surface soils. Not evaluated at MS/IM site.
Groundwater	MS/IM Site	On-Site Residents	Ingestion. Inhalation from indoor uses of groundwater.	Yes. Groundwater in the A- and B-zones underlying the MS/IM site may be used in the future for drinking water and other domestic uses. Evaluated at MS/IM site.
Air	MS/IM Site	On-Site Residents	Inhalation of volatile chemicals released from subsurface soils and groundwater.	Yes. Volatile organic chemicals may be released from subsurface soils and groundwater and may migrate into on-site residences. Evaluated at MS/IM site.
Surface Water	None	On-Site Residents	Direct contact with contaminated surface waters.	No. Releases to surface water are not anticipated to occur in the future. Not evaluated at MS/IM site.

MICRO STORAGE/INTEL MAGNETICS
SANTA CLARA, CALIFORNIA

Chemical	RfD (mg/kg/day) [Uncertainty Factor][a]	Cancer Potency Factor $(mg/kg/day)^{-1}$	EPA Weight of Evidence[b]	Source[c]
Benzene	– [d]	2.9×10^{-2}	A	IRIS
Chloroform	1×10^{-2} [1000]	6.1×10^{-3}	B2	IRIS
1,1-Dichloroethane	1×10^{-1} [1000]	9.1×10^{-2}	B2	HEA
1,1-Dichloroethene	9×10^{-3} [1000]	6.0×10^{-1}	C	IRIS
cis-1,2-Dichloroethene	1×10^{-2} [1000]	--	--	HA, 3/31/87
trans-1,2-Dichloroethene	2×10^{-2} [1000]	--	--	IRIS
Freon 11	3×10^{-1} [1000]	--	--	HEA
Freon 113	3×10^{1} [10]	--	--	IRIS
Freon 123	--	--	--	--
Methylene chloride	6×10^{-2} [100]	7.5×10^{-3}	B2	IRIS
Tetrachloroethene	1×10^{-2} [1000]	5.1×10^{-2} [d]	B2	IRIS, HEA
Toluene	3×10^{-1} [100]	--	--	IRIS
1,1,1-Trichloroethane	9×10^{-2} [1000]	--	--	IRIS
1,1,2-Trichloroethane	4×10^{-3} [1000]	5.7×10^{-2}	C	IRIS
1,2,3-Trichlorobenzene	--	--	--	--
1,2,4-Trichlorobenzene	2×10^{-2} [1000]	--	D	IRIS
Trichloroethene	7.4×10^{-3} [1000]	1.1×10^{-2}	B2	HA, 3/31/87, HEA

[a] Uncertainty factors used to develop reference doses consist of multiples of 10, each factor representing a specific area of uncertainty inherent in the data available. The standard uncertainty factors include:
- a ten-fold factor to account for the variation in sensitivity among the members of the human population;
- a ten-fold factor to account for the uncertainty in extrapolating animal data to the case of humans;
- a ten-fold factor to account for the uncertainty in extrapolating from less than chronic NOELs to chronic NOAELs; and
- a ten-fold factor to account for uncertainty in extrapolating from LOAELs to NOAELs.

[b] Weight of evidence classification schemes for carcinogens: A - Human Carcinogen, sufficient evidence from human epidemiological studies; B1 - Probable Human Carcinogen, limited evidence from epidemiological studies and adequate evidence from animal studies; B2 - Probable Human Carcinogen, inadequate evidence from epidemiological studies and adequate evidence from animal studies; C - Possible Human Carcinogen, limited evidence in animals in the absence of human data; D - Not Classified as to human carcinogenicity; and E - Evidence of Noncarcinogenicity.

[c] Sources: IRIS - Integrated Risk Information System; HEA - Health Effects Assessment Summary Tables; HA - Health Advisory.

[d] Pending review by EPA.

CRITICAL INHALATION TOXICITY VALUES

MICRO STORAGE/INTEL MAGNETICS
SANTA CLARA, CALIFORNIA

Chemical	RfD (mg/kg/day) [Uncertainty Factor][a]	Cancer Potency Factor $(mg/kg/day)^{-1}$	EPA Weight of Evidence[b]	Source[c]
Benzene	--	2.9×10^{-2}	A	IRIS
Chloroform	--	8.1×10^{-2}	B2	IRIS
1,1-Dichloroethane	1.0×10^{-1} [1000]	--	--	HEA
1,1-Dichloroethene	--	1.2	C	IRIS
cis-1,2-Dichloroethene	--	--	--	--
trans-1,2-Dichloroethene	--	--	--	--
Freon 11	2.0×10^{-1} [10000]	--	--	HEA
Freon 113	--	--	--	--
Freon 123	--	--	--	--
Methylene chloride	8.6×10^{-1} [d]	1.4×10^{-2}	B2	HEA, IRIS
Tetrachloroethene	--	3.3×10^{-3} [e]	B2	HEA
Toluene	5.7×10^{-1} [d] [100]	--	--	HEA
1,1,1-Trichloroethane	3.0×10^{-1} [1000]	--	--	HEA
1,1,2-Trichloroethane	--	5.7×10^{-2}	C	IRIS
1,2,3-Trichlorobenzene	--	--	--	--
1,2,4-Trichlorobenzene	3.0×10^{-3} [1000]	--	--	HEA
Trichloroethene	--	1.3×10^{-2}	B2	IRIS[e]

[a] Uncertainty factors used to develop reference doses consist of multiples of 10, each factor representing a specific area of uncertainty inherent in the data available. The standard uncertainty factors include:
- a ten-fold factor to account for the variation in sensitivity among the members of the human population;
- a ten-fold factor to account for the uncertainty in extrapolating animal data to the case of humans;
- a ten-fold factor to account for the uncertainty in extrapolating from less than chronic NOEL to chronic NOAELs; and
- a ten-fold factor to account for uncertainty in extrapolating from LOAELS to NOAELs.

[b] Weight of evidence classification schemes for carcinogens: A - Human Carcinogen, sufficient evidence from human epidemiological studies; B1 - Probable Human Carcinogen, limited evidence from epidemiological studies and adequate evidence from animal studies; B2 - Probable Human Carcinogen, inadequate evidence from epidemiological studies and adequate evidence from animal studies; C - Possible Human Carcinogen, limited evidence in animals in the absence of human data; D - Not Classified as to human carcinogenicity; and E - Evidence of Noncarcinogenicity.

[c] Sources: IRIS - Integrated Risk Information System; HEA - Health Effects Assessment; HA - Health Advisory.

[d] Converted from units of mg/m^3, assuming that an average adult weighs 70 kg and respires at an average rate of 20 m^3 air per day.

[e] Pending review by EPA.

TABLE 6-7

Future-Use Scenario:
Chronic Daily Intakes and Potential Risks due to
Ingestion of Groundwater and Inhalation of Volatiles
A-Zone

MICRO STORAGE/INTEL MAGNETICS

A. POTENTIAL CARCINOGENS

Chemical	ESTIMATED EXPOSURE POINT CONCENTRATIONS (ug/L)		CHRONIC DAILY INTAKE (CDI) FOR INGESTION (mg/kg/day)		LIFETIME UPPER BOUND EXCESS CANCER RISK (INGESTION)		LIFETIME UPPER BOUND EXCESS CANCER RISK (INHALATION)	
	AVERAGE	MAXIMUM	AVERAGE	PLAUSIBLE MAXIMUM	AVERAGE	PLAUSIBLE MAXIMUM	AVERAGE	PLAUSIBLE MAXIMUM
Benzene (a)	2.4	2.4	8.2E-06	2.7E-05	2E-07	8E-07	2E-07	8E-07
Chloroform	0.50	3.7	1.7E-06	4.2E-05	1E-08	3E-07	1E-07	3E-06
1,1-Dichloroethane	1.2	22	4.1E-06	2.5E-04	4E-07	2E-05	----	----
1,1-Dichloroethene	4.6	46	1.6E-05	5.3E-04	9E-06	3E-04	2E-05	6E-04
Methylene chloride	22	90	7.5E-05	1.0E-03	6E-07	8E-06	1E-06	1E-05
Tetrachloroethene	1.4	28	4.8E-06	3.2E-04	2E-07	2E-05	2E-08	1E-06
1,1,2-Trichloroethane	0.20	0.50	6.9E-07	5.7E-06	4E-08	3E-07	4E-08	3E-07
Trichloroethene	32	770	1.1E-04	8.8E-03	1E-06	1E-04	1E-06	1E-04
				TOTAL RISK	1E-05	5E-04	2E-05	7E-04

Table continued on next page.

TABLE 6-7 (CONTINUED)

Future-Use Scenario:
Chronic Daily Intakes and Potential Risks due to
Ingestion of Groundwater and Inhalation of Volatiles
A-Zone

MICRO STORAGE/INTEL MAGNETICS

B. NONCARCINOGENS

Chemical	ESTIMATED EXPOSURE POINT CONCENTRATIONS (ug/L)		CHRONIC DAILY INTAKE (CDI) FOR INGESTION (mg/kg/day)		CDI:RfD RATIO (INGESTION)		CDI:RfD RATIO (INHALATION)	
	AVERAGE	PLAUSIBLE MAXIMUM	AVERAGE	PLAUSIBLE MAXIMUM	AVERAGE	PLAUSIBLE MAXIMUM	AVERAGE	PLAUSIBLE MAXIMUM
Chloroform	0.50	3.7	1.4E-05	1.1E-04	1E-03	1E-02	--	--
1,1-Dichloroethane	1.2	22	3.4E-05	6.3E-04	3E-04	6E-03	3E-04	6E-03
1,1-Dichloroethene	4.6	46	1.3E-04	1.3E-03	1E-02	1E-01	--	--
1,2-Dichloroethene (cis/trans) (b)	3.6	69	1.0E-04	2.0E-03	5E-03	1E-01	--	--
trans-1,2-Dichloroethene	8.4	34	2.4E-04	9.7E-04	1E-02	5E-02	--	--
Freon 113 (c)	54	8200	1.5E-03	2.3E-01	5E-05	8E-03	8E-03	1E+00
Methylene chloride	22	90	6.3E-04	2.6E-03	1E-02	4E-02	7E-04	3E-03
Tetrachloroethene	1.4	28	4.0E-05	8.0E-04	4E-03	8E-02	--	--
Toluene	6.4	29	1.8E-04	8.3E-04	6E-04	3E-03	3E-04	1E-03
1,1,1-Trichloroethane	15	570	4.3E-04	1.6E-02	5E-03	2E-01	1E-03	5E-02
1,1,2-Trichloroethane	0.20	0.50	5.7E-06	1.4E-05	1E-03	4E-03	--	--
Trichloroethene	32	770	9.1E-04	2.2E-02	1E-01	3E+00	--	--
				HAZARD INDEX	2E-01	4E+00	1E-02	1E+00

-- - No inhalation toxicity criteria were available for these chemicals.

(a) - Estimated groundwater concentration assuming equilibrium with a soil concentration of 2 ug/kg. See Appendix A for details.

(b) - This value is the sum of the non-speciated 1,2-dichloroethene and the trans-1,2-dichloroethene.

(c) - Freon is a combination of Freon 113 (reported on a combination of Freon 11 and Freon 113) and Freon 123.

TABLE 6-8 Determination of Excess Lifetime Carcinogens
Risk Based on Clean-Up Standard,
2986 and 3000 Oakmead Village Court,
Santa Clara, California

Chemical	Cleanup Standard mg/1	Chronic Daily Intake	Cancer Potency Factor Oral	Oral Risk	CPF Inhale	Inhale Risk	Risk
Benzene	1.0×10^{-3}	1.1×10^{-5}	2.9×10^{-2}	3.19×10^{-7}	2.9×10^{-2}	3.19×10^{-7}	6.38×10^{-7}
1,1 Dichloroethane	5.0×10^{-3}	5.5×10^{-5}	9.1×10^{-2}	5.00×10^{-6}	9.1×10^{-2}	5.00×10^{-5}	1.00×10^{-5}
1,1 Dichloroethene	4.0×10^{-3}	4.4×10^{-5}	6.0×10^{-1}	2.64×10^{-5}	1.2	5.28×10^{-5}	7.92×10^{-5}
Methylene Chloride	5.0×10^{-3}	5.5×10^{-5}	7.5×10^{-3}	6.05×10^{-7}	1.4×10^{-2}	7.70×10^{-7}	1.38×10^{-6}
Tetrachloroethene	5.0×10^{-3}	5.5×10^{-5}	5.1×10^{-2}	2.81×10^{-6}	3.3×10^{-3}	1.82×10^{-7}	2.99×10^{-6}
Trichloroethene	5.0×10^{-3}	5.5×10^{-5}	1.1×10^{-2}	6.05×10^{-7}	1.7×10^{-2}	9.35×10^{-7}	1.54×10^{-6}

Cancer Potency Factor $(mg/kg/day)^{-1}$
Chronic Daily Intake (mg/kg/day) = Clean-up Stardard x 0.011
Risk = CDIxCPF

Total Carinogen Risk = 9.57×10^{-5}

TABLE 6-9 Determination of Total Hazard Index, for Non-Carcinogens Based on Clean-Up Standards, 2986 and 3000 Oakmead Village Court, Santa Clara, California

Chemical	Cleanup Standard MCL (mg/l)	Chronic Daily Intake	Reference Dose Oral	Oral Hazard Index	Reference Dose Inhale	Inhale Hazard Index	Hazard Index Oral & Inhale
1,1 Dichloroethane	5.0×10^{-3}	1.45×10^{-4}	1.0×10^{-1}	1.00×10^{-3}	1.0×10^{-1}	1.45×10^{-3}	2.90×10^{-3}
1,1 Dichloroethene	6.0×10^{-3}	1.74×10^{-4}	9.0×10^{-3}	1.93×10^{-2}	NA	NA	1.93×10^{-2}
1,2 Dichloroethene (cis+trans)	6.0×10^{-3}	1.74×10^{-4}	3.0×10^{-3}	5.80×10^{-2}	NA	NA	5.80×10^{-2}
Trans Dichloroethene	1.0×10^{-2}	2.90×10^{-4}	2.0×10^{-2}	1.45×10^{-2}	NA	NA	1.45×10^{-2}
Freon (Freon 113 + Freon 11)	1.2	3.48×10^{-2}	30.3	1.15×10^{-3}	2.0×10^{-1}	1.74×10^{-1}	1.75×10^{-1}
Methylene Chloride	5.0×10^{-3}*	1.45×10^{-4}	6.0×10^{-2}	2.40×10^{-3}	NA	NA	2.40×10^{-3}
Tetrachloroethene	5.0×10^{-3}	1.45×10^{-4}	1.0×10^{-2}	1.45×10^{-2}	NA	NA	1.45×10^{-3}
Toluene	4.0×10^{-2}	1.16×10^{-3}	2.0×10^{-1}	5.80×10^{-3}	5.7×10^{-1}	2.04×10^{-3}	5.80×10^{-3}
1,1,1 Trichloroethane	2.0×10^{-1}	5.80×10^{-3}	9.0×10^{-2}	6.40×10^{-2}	3.0×10^{-1}	1.93×10^{-2}	8.33×10^{-2}
Trichloroethene	5.0×10^{-3}	1.45×10^{-4}	7.4×10^{-3}	1.96×10^{-2}	NA	NA	1.96×10^{-2}

*Proposed Federal MCL

Reference Dose (mg/kg/Day)
Chronic Daily Intake (mg/kg/Day) = Cleanup Standard x 0.029
Hazard Index = CDI/RfD
NA = Not Available

Hazard Index < 1.0

7.0 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)

Under Section 121(d)(1) of CERCLA, remedial actions must attain a degree of clean-up which assures protection of human health and the environment. Additionally, remedial actions that leave any hazardous substance, pollutant, or contaminant on-site must meet a level or standard of control that at least attains standards, requirements, limitations, or criteria that are "applicable or relevant and appropriate" under the circumstances of the release. These requirements, known as "ARARs", may be waived in certain instances, as stated in Section 121(d)(4) of CERCLA.

"Applicable" requirements are those clean-up standards, standards of control and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law that specifically address a hazardous substance, pollutant or contaminant, remedial action, location, or other circumstance at a CERCLA site. "Relevant and appropriate" requirements are clean-up standards, standards of control and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law that, while not "applicable" to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site, address problems or situations sufficiently similar to those encountered at the CERCLA site that their use is well-suited to the particular site. For example, requirements may be relevant and appropriate if they would be "applicable" but for jurisdictional restrictions associated with the requirement. See the National Contingency Plan, 40 C.F.R. Section 300.6, 1986).

The determination of which requirements are "relevant and appropriate" is somewhat flexible. EPA and the State may look to the type of remedial actions contemplated, the hazardous substances present, the waste characteristics, the physical characteristics of the site, and other appropriate factors. It is possible for only part of a requirement to be considered relevant and appropriate. Additionally, only substantive requirements need be followed. If no ARAR covers a particular situation, or if an ARAR is not sufficient to protect human health or the environment, then non-promulgated standards, criteria, guidance, and advisories must be used to provide a protective remedy. Table D-1 depicts documentation of contaminant specific ARARs to be met by the MSC/IM site.

7.1 TYPES OF ARARS

There are three types of ARARs. The first type includes "contaminant specific" requirements. These ARARs set limits on concentrations of specific hazardous substance, contaminants, and contaminants in the environment. Examples of this type of ARAR are ambient water quality criteria and drinking water standards. The second type of ARAR includes location-specific requirements that set restrictions on certain types of activities based on site characteristics. These include restriction on activities in wetlands, floodplains, and historic sites. The third type of ARAR includes action-specific requirements. These are technology-based restrictions which are triggered by the type of action under consideration. Examples of action-specific ARARs are Resource Conservation and Recovery Act ("RCRA") regulations for waste treatment, storage, and disposal.

ARARs must be identified on a site-specific basis from information about specific chemicals at the site, specific features of the site location, and actions that are being considered as remedies.

7.2 CONTAMINANT-SPECIFIC ARARS AND TBCS

Section 1412 of the Safe Drinking Water Act, 42 U.S.C. Section 300g-1

Under Section 1412 of the Safe Drinking Water Act, EPA is required to set Maximum Contaminant Levels Goals (MCLGs) for ground and surface water. Under CERCLA, MCLGs that are set at levels above zero, shall be attained by remedial actions for ground or surface water that are current or potential sources of drinking water, where the MCLGs are relevant and appropriate under the circumstances of the release based on the factors in §300.400 (g)(2).

The appropriate remedial goal for each indicator chemical in ground water is the MCLG (if not equal to zero), the federal MCL, or the State MCL, whichever is most stringent.

State Board Resolution 88-63

On March 30, 1989, the Regional Board incorporated the State Board Policy of "Sources of Drinking Water" into the Basin Plan. The policy provides for a municipal and domestic supply designation for all waters of the State with some exceptions. Groundwaters of the State are considered to be suitable or potentially suitable for municipal or domestic supply with the exception of where: 1) the total dissolved solids in the groundwater exceed 3000 mg/L, and/or 2) the water source does not provide sufficient water to supply a single well capable of producing an average, sustained yield of 200 gallons per day. Based on data submitted by KCIII and Intel, the Regional Board has determined that neither of these two exceptions apply to the A and B zones at the combined MSC/IM site. Thus, the A and B zones at the combined MSC/IM site are potential sources of drinking water under state authority.

National Primary Drinking Water Standards, 40 CFR Part 141

Establishes primary maximum contaminant levels (MCLs) that are health based standards for public water systems. MCLs are ARARs for any water that is considered to be a source or potential source of drinking water. MCLs are applicable at the tap when the water is directly provided to 25 or more people or 15 or more service connections. Otherwise, MCLs are relevant and appropriate.

California's Resolution 68-16

On October 28, 1968, the State Water Resources Control Board adopted Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality Waters in California". This policy calls for maintaining the existing high quality of State waters unless it is demonstrated that any change would be consistent with the maximum public benefit and not unreasonably affect beneficial uses. The original discharge of waste to the groundwater at the combined MSC/IM site was in violation of this policy; therefore, the groundwater quality needs to be restored to its original quality as determined by the cleanup standards in Table 4.1.

7.3 ACTION SPECIFIC ARARS AND TBCS

California Department of Health Services Drinking Water Action Levels (DWALs)

California Department of Health Services (DHS) DWALs are health-based concentration limits set by the DHS to limit public exposure to substances not yet regulated by promulgated stan-

dards. They are advisory standards that apply at the tap for public water supplies. The DWAL for toluene is 100 ppb. These DWALs are not ARARs, but are "To Be Considereds" or TBCs. ARARs with more stringent requirements take precedence over these DWALs.

National Pollutant Discharge Elimination System (NPDES)

NPDES substantive permit requirements and/or RWQCB Waste Discharge Requirements (WDRs) are potential ARARs for effluent discharges. The effluent limitations and monitoring requirements of an NPDES permit or WDRs legally apply to point source discharges such as those from a treatment system with an outfall to surface water or storm drains. The RWQCB established effluent discharge limitations and permit requirements based on Water Quality Standards set forth in the San Francisco Bay Regional Basin Plan.

Safe Drinking Water Act, Underground Injection Control (UIC)

If treated ground water is injected, it must be done in compliance with regulations for a Class V underground injection well. These regulations are found in the 40 CFR 144, especially 144.13 (4) (c).

Resource Conservation Recovery Act (RCRA) Land Disposal Restrictions

The contaminated ground water contains two spent solvents that are RCRA listed wastes. TCE is an F001 listed waste, and TCA is an F002 listed waste. Adsorbents and other materials used for remediation of groundwater VOCs, such as activated carbon, chemical-adsorbing resins, or other materials used in the treatment of ground water or air will contain the chemicals after use. RCRA land disposal restrictions are not applicable but are relevant and appropriate to disposal of treatment media due to the presence of constituents which are sufficiently similar to RCRA wastes.

Preparedness and Prevention, 40 CFR 264.30, et seq. Subpart C

Applicable for on-site treatment, storage or disposal of hazardous waste.

Contingency Plan and Emergency Procedures 40 CFR 264.50 et seq. Subpart D

Applicable for on-site treatment, storage or disposal of hazardous waste.

Manifest System, Recordkeeping, and Reporting 40 CFR 264.70 et.seq. Subpart E.

Applicable when waste is transported for off-site treatment, storage, or disposal.

Occupational Safety and Health Act, 29 U.S.C. Section 651-678

Regulates worker health and safety. Applies to all response activities under the NCP.

Hazardous Material Transportation Act, 49 U.S.C. Sections 1801-1813

Hazardous Materials Transportation Regulations 49 CFR Parts 107, 171-177

Regulates transportation of hazardous materials. Applicable when carbon canisters are shipped off-site.

7.4 LOCATION-SPECIFIC ARARS

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act is an applicable requirement for the locations adjacent to Calabazas Creek and other tributary streams and marshes.

TABLE D-1. Documentation of ARARs, 2986 and 3000 Oakmead Village Court, Santa Clara, California

Chemical Specific ARARs	Alternative I No Action	Alternative II Institutional Controls and Ground Water	Alternative III Ground Water Extraction and GAC Treatment	Alternative IV Ground Water Extraction and Oxidation/ Reduction Treatment	Alternative V Ground Water Extraction and Biological Treatment
TCE	5µg/l California MCL and site specific standard may be met in several decades or longer.	5µg/l California MCL and site specific standard may be met in several decades or longer.	5µg/l California MCL and site specific standard may be met in 10-12 years.	5µg/l California MCL and site specific standard may be met in 10-12 years.	5µg/l California MCL and site specific standard may be met in 10-12 years.
Freon 113	1,200 µg/l California MCL and site specific standard may be met in several decades or longer.	1,200 µg/l California MCL and site specific standard may be met in several decades or longer.	1,200 µg/l California MCL and site specific standard may be met in 10 years or less.	1,200 µg/l California MCL and site specific standard may be met in 10 years or less.	1,200 µg/l California MCL and site specific standard may be met in 10 years or less.
1,1 DCE	4 µg/l site specific standard may be met in several decades or longer.	4 µg/l site specific standard may be met in several decades or longer.	4 µg/l site specific standard may be met in 10 years or less.	4 µg/l site specific standard may be met in 10 years or less.	4 µg/l site specific standard may be met in 10 years or less
Total 1,2 DCE	6 µg/l California MCL and site specific standard may be met in several decades or longer.	6 µg/l California MCL and site specific standard may be met in several decades or longer.	6 µg/l California MCL and site specific standard may be met in 10-12 years.	6 µg/l California MCL and site specific standard may be met in 10-12 years.	6 µg/l California MCL and site specific standard may be met in 10-12 years.
Trans 1,2 DCE	10 µg/l California MCL and site specific standard may be met in several decades or longer.	10 µg/l California MCL and site specific standard may be met in several decades or longer.	10 µg/l California MCL and site specific standard may be met in 10 years or less.	10 µg/l California MCL and site specific standard may be met in 10 years or less.	10 µg/l California MCL and site specific standard may be met in 10 years or less.
Benzene	1 µg/l California MCL and site specific standard have been met.	1 µg/l California MCL and site specific standard have been met.	1 µg/l California MCL and site specific standard have been met.	1 µg/l California MCL and site specific standard have been met.	1 µg/l California MCL and site specific standard have been met.
1,1 DCA	5 µg/l California MCL and site specific standard have been met.	5 µg/l California MCL and site specific standard have been met.	5 µg/l California MCL and site specific standard have been met.	5 µg/l California MCL and site specific standard have been met.	5 µg/l California MCL and site specific standard have been met.

TABLE D1. Documentation of ARARs,
2986 and 3000 Oakmead Village Court,
Santa Clara, California
(continued)

Chemical Specific ARARs	Alternative I No Action	Alternative II Institutional Controls and Ground Water	Alternative III Ground Water Extraction and GAC Treatment	Alternative IV Ground Water Extraction and Oxidation/ Reduction Treatment	Alternative V Ground Water Extraction and Biological Treatment
PCE	5 µg/l California MCL and site specific standard may be met in several decades or longer.	5 µg/l California MCL and site specific standard may be met in several decades or longer.	5 µg/l California MCL and site specific standard may be met in 10 years or less.	5 µg/l California MCL and site specific standard may be met in 10 years or less.	5 µg/l California MCL and site specific standard may be met in 10 years or less.
Methylene Chloride	5 µg/l site specific standard has been met.	5 µg/l site specific standard has been met.	5 µg/l site specic standard has been met.	5 µg/l site specific standard has been met.	5 µg/l site specific standard has been met.
Toluene	100µg/l California MCL and site specific standard have been met.	100 µg/l California MCL and site specific standard have been met.	100µg/l California MCL and site specific standard have been met.	100 µg/l California MCL and site specific standard have been met.	100µg/l California MCL and site specific standard have been met.
1,1,1 TCA	200 µg/l California MCL and site specific standard have been met.	200 µg/l California MCL and site specific standard have been met.	200 µg/l California MCL and site specific standard have been met.	200 µg/l California MCL and site specific standard have been met.	200 µg/l California MCL and site specific standard have been met.

8.0 DESCRIPTION OF ALTERNATIVES

KCIII submitted a Remedial Investigation/Feasibility Study dated January 9, 1991. The report contains the results of the subsurface investigation, a description of the groundwater contamination, and an evaluation of the interim cleanup actions, remedial alternatives, and groundwater conservation measures. EPA and the Regional Board staff determined that the technical information contained in the RI/FS was acceptable for developing a final cleanup plan; however EPA, and the Regional Board did not accept all interpretations and recommendations contained in the RI/FS. Specifically, EPA and Board staff disagreed with the portions of the RI addressing the extent of the groundwater pollution along the northwest edge of the plume. EPA and Board staff interpret the water quality data differently than is shown in the RI. EPA and Board staff have addressed these issues in an Agency Addendum to the RI, rather than in another revised version of the RI. This Agency Addendum is included as Part IV of this ROD.

EPA and the Regional Water Quality Control Board evaluated five remedial action alternatives for the Micro Storage/Intel Magnetics site in accordance with CERCLA Section 121, the National Contingency Plan ("NCP"), and the Interim Guidance on Superfund Selection of Remedy, December 24, 1986 (Oswer Directive No. 9355.0-19).

The Feasibility Study initially screened 21 remedial action technologies. These technologies were screened based on implementability, effectiveness, and cost criteria. The remedial technologies that survived the screening were assembled into a group of alternatives as follows:

Remedial Alternative 1

Remedial Alternative 1 is a "no further action" alternative, retained for base-line comparison purposes in accordance with CERCLA/SARA guidance. Remedial technologies are not implemented at the combined MSC/IM site under this alternative. The existing groundwater recovery treatment and discharge operation would cease, as would any groundwater monitoring. The total present worth cost of this alternative is negligible.

Remedial Alternative 2

Remedial Alternative 2 consists of the following:

- Deed restriction
- Groundwater monitoring

Total present worth cost = $46,000 to $73,000

Remedial Alternative 3

Remedial Alternative 3 consists of the following:

- Deed restriction
- Groundwater monitoring
- Groundwater extraction wells
- Carbon adsorption treatment of extracted groundwater
- Discharge of treated water to surface water under existing NPDES permit

Total present worth cost = $630,000 to $1,100,000

Remedial Alternative 4

Remedial Alternative 4 consists of the following:

- Deed restriction
- Groundwater monitoring
- Groundwater extraction wells
- Oxidation/reduction treatment of extracted groundwater
- Discharge of treated water to surface water under existing NPDES permit

Total present worth cost = $1,600,000 to $3,600,000

Remedial Alternative 5

Remedial Alternative 5 consists of the following:

- Deed restriction
- Groundwater monitoring
- Groundwater extraction wells
- Biological treatment of extracted groundwater
- Discharge of treated water to surface water under existing NPDES permit

Total present worth cost = $1,000,000 to $1,300,000

9.0 COMPARATIVE ANALYSIS OF ALTERNATIVES

This section provides an explanation of the criteria used to select the remedy, and an analysis of the remedial action alternatives in light of those criteria, highlighting the advantages and disadvantages of each of the alternatives.

Criteria

The alternatives were evaluated using nine component criteria. These criteria, which are listed below, are derived from requirements contained in the National Contingency Plan (NCP) and CERCLA Sections 121(b) and 121(c).

The alternatives were evaluated in detail with respect to the nine criteria in the FS report. A detailed analysis of the alternatives was completed in the FS. A summary of this detailed analysis is shown on Table 1.

1. Overall protection of human health and the environment. This criterion addresses whether a remedy provides adequate protection of human health and the environment.

2. Compliance with applicable or relevant and appropriate requirements (ARARs). This criterion addresses whether a remedy will meet all of the ARARs or other Federal and State environmental laws.

3. Long-term effectiveness and permanence. This criterion refers to expected residual risk and residual chemical concentrations after cleanup standards have been met and the ability of a remedy to maintain reliable protection of human health and the environment over time.

4. Reduction of toxicity, mobility or volume through treatment. This criterion refers to the anticipated performance of the treatment technologies a remedy may employ.

5. Short-term effectiveness. This criterion addresses the period of time needed to achieve cleanup and any adverse impacts on human health and the environment that may be posed during the construction and implementation period, until cleanup standards are achieved.

6. Implementability. This criterion refers to the technical and administrative feasibility of a remedy.

7. Cost. This criterion includes estimated capital and operation and maintenance, usually presented in a 30 year present worth format.

8. Support Agency Acceptance This criterion addresses EPA's acceptance of the selected remedy and any other EPA comments.

9. Community Acceptance This criterion summarizes the public's general response to the alternatives.

9.1 GROUND WATER

Threshold Criteria

Overall protection of human health and the environment

Alternatives 3, 4 and 5 would be protective of human health and the environment. Alternatives 1 (the "no action" alternative) and 2 (deed restriction with groundwater monitoring) are not protective of human health and the environment, because it is expected that the groundwater plume would continue to migrate, further degrading the aquifer. Alternative 3 would provide the greatest protection.

Compliance with applicable or relevant and appropriate requirements

Cleanup standards for this site are determined to be the California Maximum Contaminant Levels and federal Maximum Contaminant Levels. Alternatives 3, 4, and 5 would meet these ARARs within 10 - 12 years. Spent carbon canisters will be disposed of in a manner that complies with federal and state requirements, including RCRA. Table D-1 in Section 7 shows the contaminant cleanup standards to be achieved.

Primary Balancing Criteria

Long-term effectiveness and permanence

Alternatives 3, 4, and 5 would mitigate any potential future risks by preventing the migration of VOCs in groundwater, and restoring the groundwater quality of the A zone. Long-term monitoring, operation and maintenance would be required. The long-term effectiveness and permanence is anticipated to be achieved most effectively by implementing Remedial Alternative 3.

Reduction of toxicity, mobility, or volume through treatment

Alternatives 3, 4, and 5 would reduce contaminants at the site through extraction and treatment of contaminated groundwater. Alternatives 1 and 2 would not result in a

reduction of toxicity, mobility or volume since it relies on natural attenuation mechanisms, such as dispersion, sorption, diffusion and degradation.

The existing system has proven to be effective in reducing toxicity, mobility and volume of the groundwater plume. However, Alternative 3 would be the most effective. Because the Metropolitan Corporate Center plume and the MSC/IM plume are in close proximity to each other, the Board orders and EPA remedy will require that the operation of any extraction system at the MCC and MSC/IM sites be done in a coordinated effort. Both sites will be required to locate extraction wells and select pumping rates that maximize contaminant removal and minimize the hydraulic effects on the other site's groundwater plume.

Short-term effectiveness

Implementation of alternatives 3, 4, and 5 will provide short-term effectiveness. Risks associated with groundwater monitoring, recovery, treatment and discharge are mitigated by the health and safety plan for the site, and by the fact that no exposures to contaminants are anticipated.

Alternatives 1 and 2 will not be effective in containing the contaminant plume.

Implementability

Alternative 3 would utilize recovery and treatment systems which are already implemented at the site. Alternative 4 would utilize existing extraction wells but would require that a new system be built to accomodate the oxidation/ reduction treatment of extracted groundwater. Alternative 5 would also utilize existing extraction wells and require building of a new system for the biological treatment of extracted groundwater.

Alternatives 1 and 2 can be readily implemented at the site as it involves discontinuing the current remedial actions.

Cost

The cost to implement Alternatives 1 and 2 would be minimal in comparison to the other remedial alternatives for the site. The existing wells would need to be plugged and abandoned and the treatment system could be disassembled and removed from the site.

The capital cost to implement Alternative 3 would be low ($119,000) since the groundwater recovery, treatment, and discharge systems are already in use at the site. The system requires periodic maintenance to remain operable, and

the carbon units must be replaced every eight months. The present worth value ranges from $629,800 to $1,102,000 for Alternative 3.

The capital cost to implement Alternative 4 would be higher ($168,000), consisting mainly of costs associated with custom manufacturing of a oxidation/reduction unit. The present worth value of Alternative 4 ranges from $1,554,400 to $3,613,800.

The capital cost to implement Alternative 5 consists of conducting a pilot study, and manufacture of the bioreactor. Alternative 5 has a present worth value that ranges from $1,006,900 to $1,298,800.

SUPPORT AGENCY ACCEPTANCE

The Feasibility Study and the Proposed Plan Fact Sheet were reviewed by California Regional Water Quality Control Board (RWQCB). The RWQCB concurs with EPA's preferred alternative.

COMMUNITY ACCEPTANCE

The Proposed Plan was presented to the community of Mountain View in a fact sheet and at a public meeting. No technical comments were submitted regarding the alternatives. Other comments received are addressed in the Response Summary.

THE SELECTED REMEDY

Remedy Selection Rationale and Statutory Determinations

The selected remedy is protective of human health and the environment. Groundwater contamination is treated so that the remaining potential future risks fall within the 10^{-4} to 10^{-6} carcinogenic risk range for acceptable cleanup standards. The remedy complies with ARARs by achieving cleanup to at least Federal and State MCLs (proposed or adopted).

The selected remedy is effective in the short-term because further plume migration is controlled by groundwater extraction. The selected remedy is effective in the long-term by virtue of the fact that ARARs are achieved. Groundwater extraction and treatment is a permanent solution and significantly reduces pollutant toxicity, mobility and volume at the combined MSC/IM site. The selected remedy is implementable.

Based on an evaluation of the alternatives, the selected remedy for the combined MSC/IM site is Alternative No.3. KCIII has estimated that it will take approximately 10 years to achieve groundwater cleanup standards at a cost of $630,000 to $1,100,000.

The selected remedy consists of the following actions:

a. Continue groundwater extraction until cleanup standards are achieved in all combined MSC/IM site monitoring wells.

b. Install and sample a minimum of two new monitoring wells; one well located midway along a line between MMW-5 and the former location of IM-8, and one located midway along a line between MMW-9 and MMW-7.

c. Hydraulic containment of the entire groundwater plume above cleanup standards and continued groundwater extraction at the four existing wells. Modifications to the system are required in the event that the interim hydraulic control system is demonstrated not to be effective in containing and removing the groundwater contaminants.

d. Maintenance of hydraulic control to prohibit the further vertical and horizontal migration of the groundwater pollution. This requirement shall remain in effect until cleanup standards are achieved.

e. Continued quarterly groundwater monitoring at the combined MSC/IM site during the cleanup period. Water samples will continue to be collected to verify that cleanup is proceeding and that there is no migration of VOCs, above cleanup standard levels, beyond current boundaries or into the deeper B zone. Detailed sampling and reporting requirements for the combined MSC/IM site are contained in the Self-Monitoring Plan attached to the RWQCB Order No. 91-119.

f. Treatment of extracted groundwater with an existing carbon adsorption system. The treated groundwater will continue to be discharged to Calabazas Creek, under existing NPDES Permit No. CA0029670.

g. A deed restriction. MSC/IM shall be required to file a deed restriction prohibiting use of on-site shallow groundwater for drinking water and controlling other subsurface activities. The deed restriction shall remain in place until groundwater cleanup standards are achieved.

TABLE 1 Comparison of Alternatives, 2986 and 3000 Oakmead Village Court, Santa Clara, California

	Alternative I No Action	Alternative II Institutional Controls and Ground Water	Alternative III Ground Water Extraction and GAC Treatment	Alternative IV Ground Water Extraction and Oxidation/ Reduction Treatment	Alternative V Ground Water Extraction and Biological Treatment
1. Compliance With ARARs					
- Chemical Specific	Would take several decades or longer to achieve clean-up standards	Would take several decades or longer to achieve clean-up standards	Would be achieved. Clean-up standards likely would be achieved in approximately 10 to 12 years	Would be achieved. Clean-up standards likely would be achieved in approximately 10 to 12 years	Would be achieved. Clean-up standards likely would be achieved in approximately 10 to 12 years
- Action Specific	No action	No action	Complies with surface water discharge permit requirements	Complies with surface water discharge permit requirements; wastes would be handled in accordance with applicable laws	Complies with surface water discharge permit requirements
- Location Specific	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
2. Short Term Effectiveness					
- Protection of Community	No additional risks Does not prevent the use of the affected ground water	No additional risks. Prevents the use of affected ground water as a drinking water source	No additional risks The plume would be contained	No additional risks The plume would be contained	No additional risks The plume would be contained
- Protection of Workers	No additional risks	No additional risks	No additional risks	No additional risks	No additional risks
-Environmental Impacts	Discharge of impacted ground water to nearby creeks and/or SF Bay unlikely. Current impact probably negligible	Discharge of impacted ground water to nearby creeks and/or SF Bay unlikely Current impact probably negligible	The plume would be contained No impact	The plume would be contained. No impact	The plume would be contained No impact
- Approximate Time Until Clean up Standards Are Met	Several decades or longer	Several decades or longer	10 to 12 years	10 to 12 years	10 to 12 years

TABLE 13. Comparison of Alternatives, 2986 and 3000 Oakmead Village Court, Santa Clara, California (continued)

	Alternative I No Action	Alternative II Institutional Controls and Ground Water	Alternative III Ground Water Extraction and GAC Treatment	Alternative IV Ground Water Extraction and Oxidation/ Reduction Treatment	Alternative V Ground Water Extraction and Biological Treatment
3. Long Term Effectiveness and Permanence					
- Magnitude of Residual Risk	Will not change current level of risk, but level of risk will decrease with time. Affected ground water will be above clean-up standards for *several decades or* longer.	Will not change current level of risk, but level of risk will decrease with time. Affected ground water will be above clean-up standards for *several decades or* longer.	Ground water will eventually be restored to safe drinking water standards,	Ground water will eventually be restored to safe drinking water standards,	Ground water will eventually be restored to safe drinking water standards,
- Adequacy of Controls	No controls involved	Adequate to prevent potential exposure to humans	Adequate to prevent potential exposure to humans	Adequate to prevent potential exposure to humans	Adequate to prevent potential exposure to humans
-Permanence of Remedial Action	Permanent	Permanent	Permanent	Permanent	Permanent
- Effectiveness in Achieving Remedial Action Objectives	Remedial objectives will be met in several decades or longer by natural attenuation processes	Remedial objectives will be met in several decades or longer by natural attenuation processes	Remedial objectives will be met	Remedial objectives will be met	Remedial objectives will be met
4. Reduction of Toxicity, Mobility and Volume through Treatment					
-Amount of Hazardous Material Treated	None	None	Approximately 2,050,000 gallons affected ground water treated per year. Greater than 99 percent VOC removal prior to discharge	Approximately 2,050,000 gallons affected ground water treated per year. Greater than 99 percent VOC removal prior to discharge	Approximately 2,050,000 gallons affected ground water treated per year. Greater than 99 percent VOC removal prior to discharge

TABLE 13. Comparison of Alternatives, 2986 and 3000 Oakmead Village Court, Santa Clara, California (continued)

	Alternative I No Action	Alternative II Institutional Controls and Ground Water	Alternative III Ground Water Extraction and GAC Treatment	Alternative IV Ground Water Extraction and Oxidation/ Reduction Treatment	Alternative V Ground Water Extraction and Biological Treatment
4. Reduction of Toxicity, Mobility and Volume through Treatment (continued)					
- Reduction of Toxicity, Mobility and Volume	None	None	All significantly reduced	All significantly reduced	All significantly reduced
- Irreversible Treatment	None	None	Yes	Yes	Yes
- Type and Quantity of Treatment Residual	None	None	Approximately 2,000 to 4,000 pounds of spent carbon per year requiring disposal/regeneration	None	None
5. Overall Protection of Human Health and the Environment					
- Human Health					
- Environment	Negligible impact since discharge of impacted ground water to the SF Bay and vicinity creeks unlikely	Negligible impact since discharge of impacted ground water to the SF Bay and vicinity creeks unlikely	Plume contained. Discharge of treated ground water to Calabazas Creek under NPDES permit	Plume contained. Discharge of treated ground water to Calabazas Creek under NPDES permit	Plume contained. Discharge of treated ground water to Calabazas Creek under NPDES permit

TABLE 13. Comparison of Alternatives, 2986 and 3000 Oakmead Village Court, Santa Clara, California (continued)

	Alternative I No Action	Alternative II Institutional Controls and Ground Water	Alternative III Ground Water Extraction and GAC Treatment	Alternative IV Ground Water Extraction and Oxidation/ Reduction Treatment	Alternative V Extraction and Biological Treatment
6. Implementability					
- Technical Feasibility	No construction required	No construction required	System constructed and operational	Oxidation/Reduction unit would likely have to be custom manufactured	Bioreactor would likely have to be custom manufactured. Pilot study would have to be conducted
- Administrative Feasibility	Very little administrative work required	Easily implemented. Enforcement of deed restrictions could be difficult	Required permits already obtained.	Required permits already obtained	Required permits already obtained
- Availability of Materials and Services	None required	None required	Services, components and materials easily obtained. Carbon can be replaced with one to two days notice	Experience technicians to maintain unit may not be readily available	Experienced technicians to perform daily maintenance operations may not be readily vailable
7. Costs					
- Capitol	$0	$5,000 to $8,000	$119,000	$168,000	$188,000
- Annual O & M	$0	$5,000 to $8,000	$63,000 to $121,000	$171,000 to $407,000	$101,000 to $137,000
Present Worth Analysis					
- 10 years of operation	$0	$45,500 to $73,100	$629,800 to $1,102,000	$1,554,400 to $3,613,800	$1,006,900 to $1,298,800
- 12 years of operation	$0	$51,500 to $82,700	$705,300 to $1,247,000	$1,759,400 to $4,123,200	$1,127,900 to $1,463,000

TABLE 13. Comparison of Alternatives, 2986 and 3000 Oakmead Village Court, Santa Clara, California (continued)

	Alternative I No Action	Alternative II Institutional Controls and Ground Water	Alternative III Ground Water Extraction and GAC Treatment	Alternative IV Ground Water Extraction and Oxidation/ Reduction Treatment	Alternative V Ground Water Extraction and Biological Treatment
8. State Acceptance	Acceptance unlikely to be granted.	Acceptance unlikely to be granted.	Ground water extraction and treatment are approved technologies by the CRWQCB and EPA. NPDES permit has been issued for the site.	Ground water extraction and treatment are approved technologies by the CRWQCB and EPA. NPDES permit has been issued for the site.	Ground water extraction and treatment are approved technologies by the CRWQCB and EPA. NPDES permit has been issued for the site.
9. Community Acceptance	Public reaction likely to be negative	Public reaction likely to be negative	Public reaction likely to be positive since ground water extraction and treatment has been implemented at the site since 1985	Public reaction likely to be positive since ground water extraction and treatment has been implemented at the site since 1985.	Public reaction likely to be positive since ground water extraction and treatment has been implemented at the site since 1985

10.0 STATUTORY DETERMINATIONS

The selected remedies are protective of human health and the environment, comply with federal and State requirements that are legally applicable or relevant and appropriate to the remedial action, and are cost-effective. This remedies utilize permanent solutions and alternative treatment (or resource recovery) technologies to the maximum extent practicable and satisfy the statutory preference for remedies that employ treatment that reduces toxicity, mobility, or volume as a principal element.

Because the remedies will result in hazardous substances remaining on-site above health-based levels, a five-year review, pursuant to CERCLA Section 121, 42 U.S.C. Section 9621, will be conducted at least once every five years after initiation of the remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment.

11.0 DOCUMENTATION OF SIGNIFICANT CHANGES

There were no significant changes between the issuing of the preferred plan fact sheet and the Record of Decision.

RESPONSIVENESS SUMMARY

RESPONSIVENESS SUMMARY

Combined Micro Storage/Intel Magnetics Superfund Site
Santa Clara, California

Executive Summary

This Responsiveness Summary is a compilation of comments received and responses made by Regional Board staff regarding the proposed Remedial Action Plan (RAP) for the combined Micro Storage/Intel Magnetics Superfund Site.

The public comment period ran from April 17, 1991 to June 17, 1991. An initial Board Hearing was held at the April 17, 1991 Board Meeting. A public meeting, to present the proposed RAP, was held at Bracher Elementary School in the City of Santa Clara on April 24, 1991. No members of the public were present as of approximately 7:30 pm, thus, the public meeting was closed. After the public meeting was officially closed, Ms. Mary Nrabel, of the League of Women Voters, arrived. Board staff met with Ms. Nrabel and provided her with a overview of the site and the proposed RAP. Ms. Nrabel's requested that the treated extracted groundwater be either reused or reinjected.

Only one member of the community submitted written comments on the RAP. The bulk of the written comments received were from the potentially responsible parties at the site (Campeau Corporation California, Micro Storage Corporation, Intel Corporation, Kim Camp III, Kimball Small Investments III, and Westall Corporation). Regulatory agency comments were received from the Santa Clara Valley Water District, the California Department of Health Services' Environmental Epidemiology and Toxicology Branch, and the Environmental Protection Agency. The only other written comment received was from Metropolitan Life Insurance Company, the owner of the neighboring Metropolitan Corporate Center.

The lone community member, Ms. Mary Nrabel, commented that the treated extracted groundwater at the site should be reused or be reinjected. A Regional Board permit for discharging treated extracted groundwater at the site was issued to Kim Camp III (the current operator of the treatment system) in March 1990. As part of the application for this discharge permit Kim Camp III was required to first evaluate the feasibility of reuse, reclamation or discharge to a publicly owned sewage treatment plant. Kim Camp III has evaluated the feasibility of these options and found them currently infeasible. Thus, no change will be made in the RAP.

The Santa Clara Valley Water District (SCVWD) commented that they were in general concurrence with the RAP but felt that plume management and control at the Micro Storage/Intel Magnetics sites would not only depend upon the RAP prescribed for the site, but also upon the management and control of the plume emanating from the adjacent Metropolitan Corporate Center site. Board staff believes that the Site Cleanup Requirements adopted by the Board for the Metropolitan Corporate Center site on June 19, 1991 addresses the SCVWD's comments.

The California Department of Health Services' Environmental Epidemiology and Toxicology Branch commented that the accumulation within confined spaces of volatile organic compounds arising from soil-gas migration from the contaminated shallow aquifer could be a

potential concern to onsite workers. Furthermore, the Department of Health Services recommended that the Regional Board consider conducting monitoring to establish whether or not this pathway is present. Board staff has forwarded the Department of Health Services comments to the MSC/IM potentially responsible parties. However, the baseline public health evaluation under CERCLA, and resultant remedies, specifically exclude consideration of risks to onsite workers. These risks are evaluated by the Occupation Health and Safety Administration. Thus no changes will be made to the RAP.

EPA requested revisions to the RAP's language regarding future changes to the cleanup standards. These changes were requested so that the proposed plan would better stand on its own legal merits. The requested revisions were directly incorporated into the Revised Tentative Order.

The potentially responsible parties commented on a wide range of issues. However, three main comments concerned: 1) who should be named as a potentially responsible party, 2) who should be named as primarily responsible versus secondarily responsible, and 3) whether the northwest margin of the plume needs further definition.

Micro Storage Corporation, Campeau Corporation, and Campeau Corporation California all commented that they should not be listed as potentially responsible parties. Board staff has determined that Micro Storage Corporation and Campeau Corporation California should be named as potentially responsible parties. Campeau Corporation will not be named as a potentially responsible party. Kim Camp III and Intel commented that they should only be named as secondarily responsible parties. Board staff has determined that Kim Camp III and Intel should be named as primarily responsible parties. Kim Camp III and Intel commented that the need for additional plume definition along the northwest margin of the plume was unnecessary. Under contract to the Regional Board, Camp, Dresser & McKee Inc. conducted a separate peer review on the issues associated with the northwest plume definition and concurred with Board staff's interpretation. Based on this review, Board staff will continue to require additional plume definition along the northwest margin of the plume.

All verbal and written comments regarding changes to the proposed RAP have been addressed. Board staff are not aware of any outstanding comments on the proposed RAP. Based on this Responsiveness Summary, staff has not significantly changed the Tentative Order or the proposed RAP.

1.0 Public Meeting

A public meeting, to present the proposed RAP, was held at Bracher Elementary School in the City of Santa Clara on April 24, 1991. Fact Sheets mailed in April 1991, described the cleanup alternatives evaluated, explained the proposed final RAP, and announced opportunities for public comment at the April 17, 1991 Board Hearing in Oakland and the Public Meeting of April 24, 1991 in Santa Clara. In addition, Board staff published notices in the Santa Clara Weekly on April 10, 1991 and April 17, 1991, announcing the proposed RAP and opportunity for public comment at the Board Hearing of April 17, 1991 in Oakland, and announcing the opportunity for public comment at the 7 pm public meeting of April 24, 1991 at Bracher Elementary School. No members of the public were present as of 7:23 pm, and the public meeting was closed at 7:26 pm. After the public meeting was officially closed, Ms. Mary Nrabel, of the League of Women Voters, arrived. Board staff met with Ms. Nrabel and

provided her with a overview of the site and the proposed RAP. Ms. Nrabel's requested that the treated extracted groundwater be either reused or reinjected.

2.0 Written Comments

Written comments (attached) have been received from Mary Nrabel, the Santa Clara Valley Water District (SCVWD), the California Department of Health Services' Environmental Epidemiology and Toxicology Branch, the Environmental Protection Agency (EPA), Campeau Corporation, and Campeau Corporation California, Intel Corporation, Kim Camp III, Kimball Small Investments III, and Westall Corporation regarding the Tentative Order.

The general form of the remainder of the responsiveness summary is to first state the comment and then follow the comment by Board staff's response. Over 100 pages of comments were received regarding the Tentative Order. Therefore, as necessary, staff has summarized individual comments. Copies of written comments are included as attachments to the Responsiveness Summary.

3.0 Local Community Comments

3.1 Comment from Ms. Mary Nrabel, Resident Sunnyvale: "I appreciated the opportunity to talk to [Regional Board and EPA staff] last evening [at the Public Meeting]. As I indicated, I have read your Fact Sheet #2 and feel the cleanup procedure chosen is a good one. My concern is the discharge of the treated water to the storm drains. If at all possible I feel it would be better if that water could be reused by neighboring industries or somehow returned to the groundwater. I would like very much to kept informed of progress in this and other cleanup plans in the area."

Response: The Regional Board strongly encourages the reuse of treated extracted groundwater. Prior to considering the issuance of a discharge permit, the Regional Board requires that the dischargers first evaluate the feasibility of reuse, reclamation or discharge to a publicly owned sewage treatment plant. Kim Camp III has evaluated the feasibility of these options and found them currently infeasible. Thus, no change will be made in the Tentative Order. If these options become feasible in the future, the Board will consider amending the site's discharge permit. For your information, as of October 1990, approximately 38% of treated extracted groundwater was being reused or reclaimed in the South Bay. In addition, once all of the planned or under construction reuse, reinjection, or reduction in extraction flow projects are completed, this number will rise to 62%.

4.0 Regulatory Agency Comments

4.1 Santa Clara Valley Water District Comments: We have reviewed the final remedial action plan proposed for the Micro Storage/Intel Magnetics Superfund site in Santa Clara, California, and we are in general concurrence with your proposed plan.

As part of their ongoing monitoring program, we recommend that the solvent plume noted on the adjacent property, Metropolitan Life Corporation Center, be concurrently monitored as part of the remedial program. Depending upon how the data are interpreted, the two plumes are about to merge or have already merged in the area of monitoring wells MMW-2 and MMW-5. Previous findings indicated that only the A aquifer was noted to be contaminated

and any monitoring wells that could potentially serve as a conduit for contamination to migrate to deeper aquifers at the Micro Storage/Intel Magnetic sites had been destroyed. However, it is our estimation that the Metropolitan Life monitoring well MMW-2 could potentially serve as a conduit from the A aquifer to the B. The 1989 and 1990 data for this well indicated TCE levels of 18 and 11 parts per billion, respectively.

Though recent data indicates that a slight upward gradient from the B to the A aquifer occurs within much of the Micro Storage/Intel Magnetics site, we suspect the gradient is downward at the MMW-2 site area. Consideration should be given to the replacement of well MMW-2 with a monoaquifer screened monitoring well and the existing one be properly destroyed.

In summary, we are in concurrence with your proposed plan but it is also our feeling that plume management and control at the Micro Storage/Intel Magnetics sites would not only depend upon the proposed final remedial plan prescribed for the site, but also upon the management and control of the plume emanating from the adjacent Metropolitan Life Corporate Center site.

Response: On June 19, 1991 the Regional Board adopted Order No. 91-100 issuing Site Cleanup Requirements to the Metropolitan Life Insurance Company for the Metropolitan Corporate Center (MCC). Staff believes that this Order addresses SCVWD's comments regarding the replacement of MMW-2 and the monitoring and control of the plume emanating from the MCC site.

4.2 California Department of Health Services' Environmental Epidemiology and Toxicology Branch (EETB) Comments

The Environmental Epidemiology and Toxicology Branch of the California Department of Health Services (DHS) recently began conducting health assessments at Superfund sites in California. The Micro Storage/Intel Magnetics (MSC/IM) site is included on our workplan for this summer. Although the health assessment for this site is not yet complete, there are concerns we have identified at other sites in this area that may also be found to exist at the MSC/IM site.

The accumulation within confined spaces of volatile organic compounds arising from soil-gas migration from contaminated shallow aquifers has been found to be a potential public health concern at several Superfund sites. Due to structural and ventilation differences, this pathway may be of generally greater concern for residences than it is for workers in buildings. In the case of MSC/IM, there are no residences known to be impacted by the contaminated groundwater plume. However, low level, chronic exposures to workers in buildings over the contaminant plume may be of concern. If insufficient information exists to adequately evaluate this potential pathway, the health assessment may conclude an "indeterminate health hazard". You may want to consider the option of conducting monitoring to establish whether or not this pathway is present.

Response: The Regional Board appreciates EETB's initial review of the MSC/IM site. Board staff has forwarded EETB's concerns to the MSC/IM potentially responsible parties. However, the baseline public health evaluation under CERCLA, and resultant remedies, do not consider risks to onsite workers. These risks are evaluated by the Occupation Health and Safety Administration.

4.3 EPA Comments: Page 14, Paragraph 28 - the language should be changed as follows:

"If drinking water quality cannot be achieved, the dischargers must provide explanation and appropriate documentation to demonstrate to the Board and to EPA, in accordance with 42 U.S.C. Section 9621 (d)(4), that the conditions for waiving an ARAR are met (e.g., that meeting the ARAR is technically impracticable from an engineering perspective) and that the alternative proposed will be protective of human health and the environment. The Order will then need to be modified by the Board and final approval obtained by EPA to allow a less stringent groundwater cleanup standard. The dischargers will provide all documentation and explanation requested by EPA and/or the Board in order to evaluate whether an "explanation of significant differences"(ESD) must be published in accordance with 42 U.S.C. Section 9617 (c)."

Page 20, Last paragraph, Provision C(4)(e)(1)

"If the dischargers propose that it is not feasible to achieve cleanup standards, the report shall evaluate the alternative standards that can be achieved and provide explanation and appropriate documentation to establish an exception under 42 U.S.C. Section 9621(d)(4). In addition, the dischargers will provide all documentation and explanation requested by EPA and/or the Board in order to evaluate whether an "explanation of significant differences" (ESD) must be published in accordance with 42 U.S.C. Section 9617 (c)." Full curtailment must be approved by the Board and the Regional Administrator of EPA.

Table 1. Comparison of Alternatives

Language in the tables suggests technical impracticability is assumed. Please see my attachment with objectionable language removed.

Response: EPA's comments were directly incorporated into the Revised Tentative Order. The following text shall also be included in Provision C(4)(f)(1): In considering any change to cleanup standards, consideration must also be given to maintaining hydraulic control so that the adjacent unpolluted groundwater is not affected by the pollutant plume.

5.0 Potentially Responsible Party Comments

5.1 Campeau Corporation and Campeau Corporation California

Campeau Corporation and Campeau Corporation California submitted comments regarding four main issues. These issues are summarized below:

5.1.1 Comment: Campeau Corporation may not be held responsible merely as a parent corporation, and there is no basis for "piercing the corporate veil".

Response: Campeau Corporation will not be considered a potentially responsible party for the purposes of the revised Tentative Order.

5.1.2 Comment: The Board should exercise its discretion and not name Campeau California as a secondary responsible party because it has paid its fair share and another party has agreed to be solely responsible.

Response: Campeau California will continue to be considered a secondarily responsible party because it was a general partner of the current property owner (Kim Camp III).

5.1.3 Comment: The automatic stay provision of the bankruptcy code protects Campeau California from the enforcement of money judgements for cleanup liabilities.

Response: Board staff are aware that Campeau California has filed for bankruptcy. However, we believe that it is still appropriate to name Campeau California as a discharger and potentially responsible party.

5.1.4 Comment: The officers and directors of Micro Storage Corporation should be named as primarily responsible parties.

Response: Board staff has previously considered this option and found it infeasible. However, the other potentially responsible parties (PRP's) are not precluded from seeking cost recovery from the former officers and directors of Micro Storage simply because we have not named them PRP's.

5.2 Intel Corporation Comments

5.2.1 Comment. Page 1. Item 1. Paragraph 2:

This paragraph states that "chemicals used by MSC included Freon-113, which has been found in the ground water at the MSC site". The "Tenant Environmental Risk Assessment Questionnaire" filled out by K. Lan of Micro Storage and included in Appendix D of the RI/FS prepared by J.V. Lowney Associates for Kim Camp III (KC III) indicates that "nonflam./chlorinated solvent[s]" were also used. This information should be included in the Order.

Response: Finding 1 will be modified to state that "The chemicals used by Micro Storage included Freon 113 and other unspecified nonflammable/chlorinated solvents".

5.2.2 Comment. Page 2. Item 6. Paragraph 2:

Line 7 quotes the September 1988 Jacobs Engineering report as saying "a secondary source of Freon 113 and possibly TCA is believed to exist at the Intel Magnetics site...". This conclusion is based solely on "initially high concentration levels of Freon and TCA when wells IM-El and IM-E2 first started operations" (Jacobs Engineering, "Review of Contaminant Plume for Intel Magnetics Site", Sept. 1988). However, initial concentrations of TCA in these wells were <u>not</u> high in comparison with upgradient wells.

Since the Jacob's Engineering report was submitted, several reports have been submitted to the WQCB which attribute all the TCA to a source on the Micro Storage site. These documents should be mentioned in the Order, and Intel suggests that the following text be added before the third paragraph on page 3 of the Tentative Order:

> In January 1991, KCIII submitted the RI for the MSC/IM site (J. V. Lowney & Associates, 1991). TCE isoconcentration contour maps in the RI (Figures 29 through 37) confirm the Jacobs Engineering conclusion that all the TCE at the site originated at the

MSC site. Furthermore, the TCA map (Figures 38 through 46) indicate that all the TCA also originated at the MSC site. Two reports submitted to the RWQCB by Intel also present evidence against TCE and TCA sources at the Magnetics site (Weiss Associates, June 12, 1990 and March 1, 1991). These two Intel reports also state that the secondary Freon-113 source located on the Magnetics site was removed during the 1985 tank excavation and that ground water impacted by this source had been cleaned up to very low concentrations (<15 ppb over most of the site and <90 ppb in the tank excavation backfill) by early 1987. They conclude that the amount of Freon-113 remaining from the Magnetics source is insignificant compared to that from the upgradient source.

Response: Finding 6 will include a new paragraph 5 that reads, "In January 1991, KCIII submitted the RI for the MSC/IM site. TCE and TCA isoconcentration contour maps in the RI (Figures 29 through 46) indicate that the MSC site is the primary source of TCE and TCA at the combined MSC/IM site."

5.2.3 Comment. Page 3. Item 6. Paragraph 4:

This paragraph proposes to elevate Intel to primary discharger status.

This paragraph states that "it would be unfair to maintain Intel as a secondarily responsible party during the long-term cleanup phase since Intel was responsible for at least a portion of the groundwater pollution at IM". Intel strongly disagrees with this proposal and statement. A technical report has been prepared by Weiss Associates that addresses the "Assessment of Responsibility of Intel for Future Cleanup" at this site. The pertinent points of this report are summarized below.

a) Intel contributed, at most, only a small fraction of the Freon-113 to the ground water plume. All other constituents (including TCE, TCA, PCE and their breakdown products) and at least 99% of the Freon-113 in the plume were contributed by upgradient sources (see "Addendum to the Final Remedial Investigation", Intel Corporation, March 1, 1991).

b) As mentioned under Comment 2 above, Intel removed the potential source of Freon-113 and cleaned up impacted ground water to very low concentrations by early 1987.

c) As of March 1991, Intel had spent about $450,000 on investigations and remediation at the IM site. It is estimated that at least $173,000 of this was spent as a direct result of the upgradient Micro Storage source. This figure does not take into account the costs incurred by Intel from early 1985 to early 1987 to remediate a small Freon-113 plume originating from the IM site. While it is unknown how much the Micro Storage dischargers have spent,it is undoubtedly much less than Intel has spent in total and significantly less in proportion to the respective source contributions. Intel has been investigating and remediating the site since 1982, while Micro Storage has only been involved since late 1988.

d) All of the excess cancer risk associated with the Micro Storage/Intel Magnetics site, as calculated by Clement Associates and presented in the Baseline Public

Health Evaluation (BPHE) and on Page 8, Item 18 of this Order,is attributed to chemicals (primarily TCE and 1,1-DCE) originating from the MSC site. Without this excess cancer risk it is very unlikely that the combined MSC/IM site would even be on the NPL.

e) Furthermore, as shown in Table SMP-2 of this Order, the cleanup standards for TCE, PCE and the breakdown products of TCE and/or TCA are what drive the current cleanup efforts at the site. As stated on Page 13, Item 25 of the Order, TCE, with a cleanup standard of 5 ppb, will most likely be the limiting factor in achieving the overall cleanup goals. All of these compounds are associated only with the MSC source. The 1,200 ppb cleanup goal for Freon-113 has already been achieved for the entire plume, with the possible exception of the Micro Storage source area monitored by well MW-3.

What seems unfair is that Intel is expected to be a primarily responsible party when it has remediated any contamination originating from the IM site and contributed much more than its fair share for the area wide plume cleanup.

Therefore, Intel requests that it not be identified as a primarily responsible party with regard to the MSC site (source area) and, further, for the chemicals (pollutants) that have migrated or will migrate downgradient from that site.

Intel recognizes and accepts primary responsibility for the remediation of the IM site (source area) and for any downgradient migration of the chemicals (pollutants) from the IM site. Intel believes and Weiss Associates has clearly proven in their several reports on the subject that Intel has already cleaned up the source area at the IM site, and, further, has already cleaned up any chemicals (Freon-113) that migrated downgradient.

Therefore, Intel's responsibility for any further activities relating to the IM site source area and for the downgradient migration of chemicals from that source should be secondary to and only required by the failure of the MSC dischargers to perform as the primarily responsible party.

Intel requests that Paragraphs 3 through 5 on Page 3 be deleted and replaced with the following:

> Order No. 89-086 named Intel and OVDL as secondarily responsible parties. This was done because Intel had remediated the identified source of Freon-113 at the IM site and because any amount of Freon-113 remaining in ground water attributable to the former IM source area was (and is) well below the 1,200 ppb cleanup goal for Freon-113 set forth in this Order. If KCIII should determine that additional source areas exist at the IM site which are contributing to the plume that is being remediated pursuant to this Order, the Executive Office may elevate Intel to the status of a primarily responsible party.
>
> This Order provides that Intel will continue to be a secondarily responsible party for the portion of the plume attributable to unremediated source areas presently located at the IM site. As stated in Provision C.3 of this Order, "[i]f KCIII demonstrates to the satisfaction of the Executive Officer that a newly identified actual,and unremediated

source(s) of chemicals (pollutants) presently exist at the IM site and presently contribute to the plume being remediated pursuant to this Order, the Executive Officer may elevate Intel to a primarily responsible party for any newly identified IM source areas and for the chemicals (pollutants) originating there from, Intel shall comply with the provisions of this Order which pertain to the IM site within 60 days of the determination of the Executive Officer and actual notice to Intel. Intel shall not be responsible for any activities associated with or arising from chemicals (pollutants) originating from the MSC site or from any other site which Intel did not own or operate."

This Order provides that OVDL is a tertiarily responsible party for the portion of the plume attributable to the IM site. As stated in Provision C.4 of this Order, "[i]f KCIII demonstrates to the satisfaction of the Executive Officer that a newly identified, actual, and unremediated source(s) of chemicals (pollutants) presently exist at the IM site and presently contribute to the plume being remediated pursuant to this Order,the Executive Officer may elevate OVDL to a secondarily responsible party for any newly identified IM source areas and for the chemicals (pollutants) originating therefrom. If Intel fails to comply with the provisions of this Order which pertain to the IM site, within 60 days of the determination of the Executive Officer and actual notice to OVDL, OVDL shall comply with the provisions of this Order which pertain to the IM site. OVDL shall not be responsible for any activities associated with or arising from chemicals (pollutants) originating from the MSC site or from any other site which OVDL did not own or operate."

This Order provides that Kimball Small Investments III, Westall Corporation, Campeau Corporation California, and Campeau Corporation are secondarily responsible for all discharges. As stated in Provision C.5 of this Order,"[i]f KCIII fails to comply with any of the provisions of this Order, within 60 days of the Executive Officer's determination and actual notice to Kimball Small Investments III, Westall Corporation, Campeau Corporation California, and Campeau Corporation, as general partners or parent company, shall comply with the provisions of this Order."

Response: Intel must be named as a primarily responsible party even if the IM site was only a secondary source of the groundwater pollution. The secondary responsible discharger designation is intended for use in property owner/tenant situations. As such, the identification of Intel as a secondary responsible party in Order 89-186 was technically incorrect. Thus, no change to the Tentative order is warranted.

5.2.4 Comment Page 3. Item 7:

As presented in the Weiss report and supported by the Jacobs report, TCE is not attributable to the IM site. TCE was detected in upgradient well IM-2 in late 1982 which is 3 years prior to the leasing of the MSC site by Micro Storage Corp. Therefore, previous owner(s) and/or operator(s) of the MSC site must be evaluated as potentially responsible parties. To the extent such parties are identified, this Order should be revised to include them as primary or secondary responsible parties with the MSC site carrying over all requirements of this Order. Intel requests that the finding be reworded as follows:

National Priority List "Superfund":

The IM site was placed on the National Priority List (NPL) in May 1986. In 1988 the MSC site was included with the IM site as one combined Superfund site. Pursuant to Health and Safety Code Sections 25356.1 (c) and (d) the only identified responsible parties associated with the release of pollutants to the subsurface at this location are MSC, KCIII, Kimball Small Investments III, Westall Corporation, Campeau Corporation California, and Campeau Corporation, Intel, OVDL and potential, prior owners/operators of the MSC site. KCIII is required to submit reports for the combined site. KCIII has accepted responsibility for the site cleanup for the MSC portion of the combined MSC/IM Superfund site and the plume that has migrated downgradient as defined in the RI report. Since this is the only remaining work to be completed at the combined MSC/IM site, KCIII is the primary responsible party. Intel has accepted responsibility for the IM portion of the site and on the basis of information presently available to the Executive Officer, has completed responsibilities.

Response: Finding 7 will include the following language: "TCE was detected in a monitoring well located upgradient to the Intel solvent tank in late 1982 which was three years prior to the leasing of the MSC site by Micro Storage Corp. Therefore, previous owner(s) and/or operator(s) of the MSC site may be potentially responsible parties (PRPs). However, at this time, the Regional Board has insufficient information to name any other parties as PRPs. In the future if new evidence becomes available to the Board that other PRPs are responsible for the combined MSC/IM site, then this Order may be revised".

5.2.5 Comment. Page 5. Item 10. Paragraph 2:

The last sentence states "the only chemicals detected in the A-zone above drinking water standards were TCE, 1,1-DCE and 1,2-DCE...". None of these compounds can be attributed to an Intel Magnetics source. This should be stated in the Order.

Response: The chemicals attributed to Intel Magnetics are already listed in Finding 1. Thus, no change is necessary.

5.2.6 Comment. Page 5. Item 11.1:

The Order must include the factual finding that the underground tank formerly located at the IM site was tested both in the ground and after its removal and was found to not have any leaks. Intel believes that specific tank test reports have been submitted to the RWQCB in the past. Intel will send additional copies under separate cover.

Response: A new third sentence will be included that reads, "The tank was reportedly tested both in the ground and after its removal and found to not have any leaks."

5.2.7 Comment. Page 5. Item 11.2. Paragraph 1:

The last sentence states "chemicals used by MSC included Freon 113, which has been found in the groundwater at the MSC site". See Comment 1 above.

Response: Finding 11.2 will be modified to state that "The Chemicals used by Micro Storage included Freon-113 and other unspecified nonflammable chlorinated solvents."

5.2.8 Comment. New Tasks 1 & 2 under Provisions C.4 (see Page 18) and revised Attachment A:

In the May 1, 1991 "Notice of Intent to Revise Tentative Order..." from the WQCB, two new tasks and a revised version of Attachment A for the Order are presented. This Attachment and these tasks deal with plume definition in the vicinity of wells MMW-2,5, and 9 on the Metropolitan property. The Attachment states "KCIII believes that the pollution detected in MMW-7 is from the MSC/IM site and the pollution detected in MMW-2,5 and 9 is from the Metropolitan site. Metropolitan, on the other hand, believes that the pollution in MMW-2,5,7 and 9 is all from the combined MSC/IM site". Although the Attachment does not state the WQCB's position, it does state "Board staff interpret the water quality data differently than is shown in the RI" (KCIII's/Lowney's interpretation), implying that they agree with the Metropolitan interpretation. The Lowney RI report is supported by the following facts:

1) MMW-2,5 and 9 are nearly directly downgradient of MMW-10. Groundwater samples collected from MMW-10 contain significantly higher TCE concentrations than any collected from MMW-2, 5 and 9. MMW-2, 5 and 9 are almost directly cross-gradient of the MSC/IM TCE source area.

2) In 1990, concentrations of TCE as high as 22 ppb were detected in MMW-2, 5 and 9, while the other components of the MSC/IM plume (TCA and Freon-113) were not detected at all.

3) Only TCE and 1,2-DCE are typically detected in the upgradient Metropolitan well MMW-10. This is also true for wells MMW-2,5 and 9.

The new Tasks 1 and 2 require the parties with primary responsibilities for the MSC/IM site to install at least two new monitoring wells between the known northwest extent of the MSC/IM plume and the known north east extent of the Metropolitan plume. At a later date, Metropolitan will be required to install at least one new well between MMW-10 and MMW-2 to better define its plume. Given the reasons listed above, we propose that the RWQCB require Metropolitan to install three (3) well(s) with at least one well upgradient of MMW-10 (since the source of the TCE plume has not been identified). If the results from the new wells indicate that the TCE in wells MMW-2,5 and 9 is from the Metropolitan source, then Metropolitan should complete the rest of their plume's definition. If the new wells implicate the MSC plume, then KCIII should install the new wells. Intel should not be assigned any responsibility for this investigation since the data so clearly demonstrates that the chemicals could not have originated at the IM (3000 Oakmead) site.

Response: Under contract to the Regional Board, Camp, Dresser & McKee (CDM) Inc. conducted a separate peer review on the issues associated with the northwest plume definition and concurred with Board staff's interpretation (see Attachment 10., letter from CDM dated April 26, 1991).

Regarding Item 1) of Intel's comment: Board staff and CDM concluded that the NNE groundwater flow coupled with lateral dispersion of the plume can account for the plume spreading (or fanning out) and affecting wells MMW-2 and 5.

Regarding Item 2): Freon 113 was detected in samples collected from MMW-2 on February 14,

1990 and July 26, 1990, at 9.5 and 5.0 parts per billion respectively. Freon-113 was also detected in MMW-2 at 72 ppb in June of 1989 (see Semiannual Groundwater Monitoring Results - Metropolitan Corporate Center, Levine-Fricke, March 29, 1991).

Regarding Item 3): Board staff recognizes that the Metropolitan Corporate Center (MCC) has its own pollutant plume that is not yet fully defined. On June 19, 1991, the Regional Board adopted Order No. 91-100, which requires the Metropolitan Life Insurance Co. (MLIC) to define the extent of the MCC pollutant plume and institute interim remedial measures.

In summary, the Regional Board believes that having both MLIC and the dischargers at the MSC/IM site work simultaneously on defining the northwest plume margin of the MSC/IM plume and the eastern margin of the MCC plume is the most timely and equitable option. Thus, no changes will be made regarding this subject beyond the modifications included in the May 1, 1991, letter to the MSC/IM dischargers.

5.2.9 Comment. Page 22. Provision 7:

For years Intel has submitted reports for this site. Since 1989, KCIII has taken over the responsibility of submitting the required periodic monitoring reports to the Board. To eliminate the duplication of effort currently required by this provision, and in recognition of KCIII's primary responsibility, the reporting requirements should continue to be required only of KCIII, and not of Intel or any other party.

Response: The Order is written such that all of the dischargers are jointly and severally responsible for complying with the provisions and specifications of this Order. Thus, if Kim Camp III fails to submit reports for the site, then each individual discharger is responsible for submittal of the reports.

5.3 Kim Camp III submitted comments on behalf of Kim Camp III, Kimball Small Investments III, and Westall Corporation.

5.3.1 Comment. Finding 6, paragraph 5, page 3:

We object to the fact that Kim Camp III was named in a primary position in Order 89-086 "because Kim Camp III was found to be the primary source of the groundwater pollution". Kim Camp III is not and never has been a user of chemicals, and it has not caused any pollution. The fact that Kim Camp III began investigative work in 1987 is also irrelevant to primary versus secondary status.

We would like this paragraph to acknowledge that Kim Camp III was erroneously named as a primarily responsible party in Order 89-086. At a minimum, the order should be rewritten to state that Kim Camp III is a responsible party solely due to its property owner status. All references to Kim Camp III as a polluter should be deleted.

Response: Finding 6 will be revised to state that "Kim Camp III's property was found to be the primary source of groundwater pollution". In addition, paragraph 4 of Finding 1 will include a new last sentence that reads, "To date no evidence indicates that Kim Camp III, Kimball Small Investments III, Westall Corporation, Campeau Corporation California, or 3000 Oakmead Village Drive Ltd. used the chemicals found in the groundwater at the site".

5.3.2 Comment. Finding 6, paragraphs 6 & 7, page 3:

These paragraphs list the responsible parties in the Tentative Order and assign them primary or secondary status. We feel that there are three basic problems herein. First, we do not feel that the CRWQCB has named all responsible parties. Specifically, enclosed is a letter from J.V. Lowney & Associates dated April 23, 1991 identifying at least one additional responsible party, Micro Storage's predecessor as tenant of 2986 Oakmead Village Court, International Diagnostic Technology (IDT).

Response: Insufficient evidence is included in the April 23, 1991, letter to name IDT as a discharger. No evidence that IDT used or stored the chemicals currently found in the groundwater has been submitted. IDT's role as a possible source of groundwater pollutants was not addressed in the Remedial Investigation. However, we realize that groundwater data indicates a release prior to Micro Storage's tenancy (see Section 5.2.4).

5.3.3 Comment. Finding 6, paragraphs 6 & 7, page 3 (cont):

Although IDT has previously stated that they did not use TCE, Intel and Micro Storage have made similar claims as well. However, TCE was a common (un-named) component of many industrial products used by Intel and IDT when they occupied the IM/MSC site, and to a lessor degree, it was still a component of products used during Micro Storage's tenancy. Micro Storage not being able to account for all of its Freon 113 is not a valid reason that it was the one who spilled TCE. Intel, Micro Storage and IDT all used products containing TCE during their tenancy. They should jointly and severally be named as primary responsible parties.

The second problem is that Kim Camp III is named as a primarily responsible party. Kim Camp III is a passive property owner and should be named as a secondarily responsible party, just as you have named 3000 Oakmead Village Drive Limited. It is not appropriate to combine the 2986 Oakmead Village Court and 3000 Oakmead Village Drive addresses into one site, and then to assess the two property owners differently.

Lastly, the second sentence of paragraph 6 implies a lack of cooperation on the part of Kim Camp III. This, as you know, is not accurate. Kim Camp III has cooperated with the CRWQCB's investigation as soon as it was asked to do so in 1987. The sentence should be rewritten to reflect this fact. Actually, this sentence should be deleted because it is an inappropriate reason to name Intel as a primarily responsible party. Intel should be a primarily responsible party because it was a user of toxic chemicals, and it caused a release of these chemicals to occur on its property.

Response: Regarding the first point, no evidence has been submitted that any of the parties used TCE during their tenancy. The fact that Micro Storage Corp. (MSC) was found to have lost 10 gallons of Freon-113, a pollutant found in the groundwater at the site, is sufficient evidence for naming MSC as a discharger. No similar evidence has been submitted regarding IDT (i.e., that IDT used or lost any of the chemicals that are now found in the groundwater).

Regarding the second point, Kim Camp III (KC III) was elevated from secondarily responsible to primarily responsible in March 1989 because of MSC's failure to comply with the

Specifications of Order 89-017. Once a discharger has been elevated to primary discharger status, the discharger shall not be demoted to secondary status unless new information indicates that the previous primarily responsible party (in this case MSC) will take over the cleanup. All current information indicates that MSC will continue to be unable to cleanup the site.

5.3.4 Comment. Finding 6, paragraph 8, page 3:

The last sentence is unclear as to whether you are referencing Order 89-017 or the Tentative Order when stating that Kim Camp III is a primarily responsible party. Although we feel it was wrong to give Kim Camp III primary status in Order 89-017, that Order is now rescinded, so we have no comment if this is your intent. However, if your reference is to the referenced Tentative Order, then this sentence should be removed for the reasons outlined in item 2 above.

Response: The last sentence refers to the current Tentative Order. No change will be made (see response to Comment 5.3.3)

5.3.5 Comment. Finding 7, page 4:

The last sentence of this paragraph states that "Intel and Kim Camp III have accepted responsibility for the site cleanup." This implies that Kim Camp III is prepared to proceed without regard to the responsibilities of others, especially those directly responsible for actual releases. This is absolutely not true. There is a track record of years of correspondence from Kim Camp III, both verbal and written, stating that Kim Camp III does not accept responsibility for site cleanup. This sentence should be deleted in its entirety.

Response: The last sentence of Finding 7 will be deleted.

5.3.6 Comment. Finding 10, paragraph 2, page 5:

This paragraph implies that the VOCs from the combined Intel/Micro Storage site have impacted the B-Zone aquifer. This is not accurate. During the last 4 years, only one B Zone sample has shown a trace level of contamination. This is most likely due to laboratory contamination. This paragraph should be modified accordingly or deleted.

Response: The third sentence of Finding 10 will be revised to read, "With the exception of monitoring well MMW-2 only one B zone sample has shown a trace of pollution. This is most likely due to laboratory contamination. Monitoring well MMW-2 appears to be screened across both the A and B aquifers. In 1990 MMW-2 had an average concentration of TCE of 32 ppb. Board Order No. 91-100 requires Metropolitan Life Insurance Company to consider replacing MMW-2 with a mono-aquifer screened well and properly destroy MMW-2."

5.3.7 Comment. Finding 11.2, paragraph 2, page 5:

The Tentative Order states "Historically, the highest levels of groundwater pollution are beneath the parking lot of the MSC site." This statement is incorrect. During the early to mid 1980's, the highest levels of groundwater pollution were detected at the former Intel site. In addition, the highest levels of Freon 113 recorded were from the Intel extraction well. This

> "Since the shallow groundwater from beneath the combined MSC/IM site is not currently used for drinking water supply, no current risk was identified at the combined MSC/IM site. Potential future health risks are based on exposures that could occur in the future if untreated shallow zone groundwater was used for human consumption and residential development occurred on the combined MSC/IM site."

If there is going to be a deed restriction placed upon the property as stated in Finding 23.f, then there is no public health risk per Finding 18. If there is no public health risk associated with the site, then in would not be in the public's best interest to spend State funds administering this site. Therefore, we feel that Remedial Alternative 2, a deed restriction with limited monitoring is the proper alternative.

Actually, it is not clear to us why residential development should be precluded from the site. There are other CRWQCB sites with similar groundwater pollution where residential development has occurred. Therefore, we would like the CRWQCB to consider this when negotiating with the property owners over the wording of the deed restrictions.

Response: KC III is correct regarding the fact that there is no current risk at the site relative to ingestion of polluted drinking water (see comment 3.2 regarding a potential current risk via the inhalation exposure pathway). However, there is a potential future risk if no further cleanup is conducted at the site. A shallow private well could be installed if the site were redeveloped residential. In addition, if the plume were left unattended it could migrate to deeper aquifer zones along vertical conduits or natural gaps or cracks in the aquitards. KC III should note that the deed restriction will not preclude residential development of the site. The deed restriction is only intended to prohibit the installation of shallow drinking water wells, provide constructive notice, and additional protection until cleanup standards are achieved. As such, no change in selection of Remedial Alternative 3 is warranted.

5.3.10 Comment. Finding 28, paragraph 2, page 14:

The first two sentences state that if groundwater extraction cannot meet drinking standards, then extraction will continue as long as "significant" quantities of chemicals are being removed. "[S]ignificant" needs to be defined or deleted. Sentence 4 gives criteria for curtailing groundwater extraction. If groundwater extraction meets these criteria, then it should be curtailed regardless of whether or not "significant" quantities of chemicals are being removed.

Response: The word "significant" will be deleted. In addition, paragraph 2 of Finding 28 will be revised to include the new language proposed by EPA (see section 4.3).

5.3.11 Comment. Section C.3, page 18:

This paragraph should be changed for the reasons stated in items 1 and 2 above to read:

> "If Intel, Micro Storage and IDT fail to comply with any of the provisions of this Order, within 60 days of the Executive Officer's determination and actual notice 3000 Oakmead Village Drive Ltd and Kim Camp III, as landowners, shall comply with the provisions of this Order."

paragraph should be modified to correctly state these facts.

Response: The word "Historically" will be replaced with the word "Currently".

5.3.8 Comment. Finding 19, paragraphs 2 & 3, page 9:

This portion of the Tentative Order takes exception by the CRWQCB to certain sections of the Remedial Investigation (RI), prepared by J.V. Lowney & Associates on behalf of Kim Camp III, dealing with the Metropolitan Corporate Center site (MCC). The CRWQCB has issued Attachment A to the Tentative Order, revised per your May 1, 1991 letter, regarding this point. The following comments refer to paragraph 4 of Attachment A. Figure 2, a map of well locations in and around the site, is enclosed herein for reference.

The first sentence states that "the plume" is not fully defined between the former location of IM-8 (near MMW-7) and MMW-9. We assume "the plume" refers to the combined IM/MSC plume. The location that you are referring to is in the middle of the MCC site, which, as all groundwater data clearly indicates, is cross-gradient to the IM/MSC site. Therefore, "the plume" does not extend into this area in question.

Sentences two, three and four describe the CRWQCB requests, and Kim Camp III's decline of requests, to investigate this area. The reason for Kim Camp III's actions are simple. This area is clearly not affected by the IM/MSC plume due to its cross-gradient location.

The CRWQCB acknowledges that there is at least one separate VOC plume emanating from the MCC site. Referring to Figure 2, it is clear by the number of wells installed to date that the IM/MSC site has been thoroughly researched, but this is not the case with the MCC site. Any investigative work on the MCC site should be carried out under the MCC Tentative Clean-up Order.

The proposed RI by J.V. Lowney & Associates contains an accurate description of the facts. Therefore, Attachment A to this Tentative Order should be deleted in its entirety.

Response: A similar comment was made by Intel. Please see response in Section 5.2.8. In addition, there is an insufficient number of data points along the northwest plume margin to conclude that the lateral extent of the plume is defined.

5.3.9 Comment. Finding 23, pages 12 & 13:

Finding 23 is the selection by the CRWQCB of Remedial Alternative 3 from Finding 21. We feel that this alternative is contradictory and not in the best interest of the public. Specifically, 23.f indicates that:

> "The dischargers shall be required to file a deed restriction prohibiting the use of on-site shallow groundwater for drinking water and controlling other subsurface activities."

However, Finding 18, the Baseline Public Health Evaluation states:

Response: No change will be made. See Section 5.3.3 regarding why KC III cannot be named as a secondarily responsible party and why IDT is not named as a discharger.

6.0 Responsiveness Summary Conclusion and Changes to the Proposed RAP

All verbal and written comments regarding changes to the proposed RAP have been addressed. Board staff are not aware of any outstanding comments on the proposed RAP. Based on this Responsiveness Summary, staff has not significantly changed the Tentative Order.

Attachments:

1. Mary Nrabel comments dated April 25, 1991.
2. Santa Clara Valley Water District comments dated May 15, 1991.
3. California Dept. of Health Services comments dated June 20, 1991.
4. U.S Environmental Protection Agency comments dated June 6, 1991.
5. Heller, Ehrman, White & McAuliffe (on behalf of Campeau) comments dated June 17, 1991. Appendix to comments available upon request.
6. Intel Corp. comments dated June 17, 1991. Appendix to comments available upon request
7. Kim Camp III, Kimball Small Investments III, Westall Corp. comments dated June 17, 1991
8. Levine-Fricke (on behalf of Metropolitan Life Insurance Co.) dated May 16, 1991.
9. Nossaman, Guthner, Knox & Elliott (on behalf of Micro Storage Corp.) dated June 17, 1991.
10. Camp, Dresser & McKee, Inc., April 26, 1991, Review of Selected Compliance Points for Micro Storage/Intel Magnetics Final Remedial Action Plan.
11. Transcript of April 24, 1991, Community Meeting (available upon request)

April 25, 1991

Dear Mr. Barton

I appreciated the opportunity to talk to you last evening. As I indicated, I have read your fact sheet #2 and feel the clean-up procedure chosen is a good one. My one concern is the discharge of the treated water to the storm drains. If at all possible I feel it would be better if that water could be reused by neighboring industries or somehow returned to the ground water.

I would like very much to be kept informed of progress in this and other clean-up plans in the area.

Sincerely

Mary Vrabel

Santa Clara Valley Water District

5750 ALMADEN EXPRESSWAY
SAN JOSE, CALIFORNIA 95118
TELEPHONE (408) 265-2600
FACSIMILE (408) 266-0271
AN AFFIRMATIVE ACTION EMPLOYER

May 15, 1991

Mr. Greg Bartow
Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, CA 94612

Dear Mr. Bartow:

Subject: Comments on Micro Storage/Intel Magnetics Final RAP

We have reviewed the final remedial action plan proposed for Micro Storage/Intel Magnetics Superfund site in Santa Clara, California, and we are in general concurrence with your proposed plan.

As part of their ongoing monitoring program, we recommend that the solvent plume noted on the adjacent property, Metropolitan Life Corporation Center, be concurrently monitored as part of this remedial program. Depending upon how the data are interpreted, the two plume are about to merge or have already merged in the area of monitoring wells MMW-2 and MMW-5. Previous findings indicated that only the A aquifer was noted to be contaminated and any monitoring wells that could potentially serve as a conduit for contamination to migrate to deeper aquifers at the Micro Storage/Intel Magnetic sites had been destroyed. However, it is our estimation that the Metropolitan Life monitoring well MMW-2 could potentially serve as a conduit from the A aquifer to the B. The 1989 and 1990 data for this well indicated TCE levels of 18 and 11 parts per billion, respectively.

Though recent data indicates that a slight upward gradient from the B to the A aquifer occurs within much of the Micro Storage/Intel Magnetics site, we suspect the gradient is downward at the MMW-2 site area. Consideration should be given to the replacement of well MMW-2 with a monoaquifer screened monitoring well and the existing one be properly destroyed.

In summary, we are in concurrence with your proposed plan but it is also our feeling that plume management and control at the Micro Storage/Intel Magnetics sites would not only depend upon the proposed final remedial plan prescribed for the site, but also upon the management and control of the plume emanating from the adjacent Metropolitan Life Corporate Center site.

Please call Tom Iwamura or myself should you have any questions.

Sincerely,

David J. Chesterman
Supervising Engineer
Groundwater Protection Division

TATE OF CALIFORNIA—HEALTH AND WELFARE AGENCY PETE WILSON, Governor

DEPARTMENT OF HEALTH SERVICES
2151 BERKELEY WAY
BERKELEY, CA 94704-1011
(415) 540-3657

June 20, 1991

Mr. Greg Bartow
Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, CA 94612

RE: Micro Storage/Intel Magnetics Superfund site, Santa Clara, California

Dear Mr. Bartow:

The Environmental Epidemiology and Toxicology Branch (EETB) of the California Department of Health Services (DHS) recently began conducting health assessments at Superfund sites in California. The Micro Storage/Intel Magnetics (MS/IM) site is included on our workplan for this summer. Although the health assessment for this site is not yet complete, there are concerns we have identified at other sites in the area that may also be found to exist at the MS/IM site.

The accumulation within confined spaces of volatile organic compounds arising from soil-gas migration from contaminated shallow aquifers has been found to be a potential public health concern at several Superfund sites. Due to structural and ventilation differences, this pathway may be of generally greater concern for residences than it is for workers in buildings. In the case of MS/IM, there are no residences known to be impacted by the contaminated groundwater plume. However, low level, chronic exposures to workers in buildings over the contaminant plume may be of concern. If insufficient information exists to adequately evaluate this potential pathway, the health assessment may conclude an "indeterminate health hazard". You may want to consider the option of conducting monitoring to establish whether or not this pathway is present.

If there is a need for further clarification please contact David Borgeson, Diana Lee, or me at (415) 540-3657.

Sincerely,

Lynn R. Goldman

Lynn R. Goldman, M.D., M.P.H., Chief
Environmental Epidemiology and
Toxicology Branch

cc: See next page.

cc: Sean Hogan
Environmental Protection Agency
Mail Stop H-6-3
75 Hawthorne Street
San Francisco, CA 94105

David Borgeson
Diana Lee
Environmental Epidemiology
and Toxicology Branch
5900 Hollis Street, Suite E
Emeryville, CA 94608

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105

June 6, 1991

Greg Bartow
California Regional Water Quality
Control Board
2101 Webster Street, Suite 500
Oakland, CA 94612

SUBJECT: PROPOSED FINAL REMEDIAL ACTION PLAN AND SITE CLEANUP REQUIREMENTS FOR: Micro Storage/Intel Magnetics Combined Federal Superfund Site

Dear Greg:

The Environmental Protection Agency has reviewed the Proposed Final Remedial Action Plan and Site Cleanup Requirements for the Micro Storage/Intel Magnetics Superfund Site. We request that the attached changes be made to the order.

Thanks for making the changes and if I can clarify any issues, please give me a call.

Sincerely,

Rose Marie Caraway
Remedial Project Manager

jkkl/ordrcom/RPIF

EPA COMMENTS TO MICRO STORAGE/INTEL MAGNETICS TENTATIVE ORDER

Page 14, Paragraph 28 - the language should be changed as follows:

"If drinking water quality cannot be achieved, the dischargers must provide explanation and appropriate documentation to demonstrate to the Board and to EPA, in accordance with 42 U.S.C. Section 9621 (d)(4), that the conditions for waiving an ARAR are met (e.g., that meeting the ARAR is technically impracticable from an engineering perspective) and that the alternative proposed will be protective of human health and the environment. The Order will then need to be modified by the Board and final approval obtained by EPA to allow a less stringent groundwater cleanup standard. The dischargers will provide all documentation and explanation requested by EPA and/or the Board in order to evaluate whether an "explanation of significant differences"(ESD) must be published in accordance with 42 U.S.C. Section 9617 (c)."

Page 20, Last paragraph, Provision C(4)(e)(1)

"If the dischargers propose that it is not feasible to achieve cleanup standards, the report shall evaluate the alternative standards that can be achieved and provide explanation and appropriate documentation to establish and exception under 42 U.S.C. Section 9621(d)(4). In addition, the dischargers will provide all documentation and explanation requested by EPA and/or the Board in order to evaluate whether an "explanation of significant differences" (ESD) must be published in accordance with 42 U.S.C. Section 9617 (c)." Full curtailment must be approved by the Board and the Regional Administrator of EPA.

Table 1. Comparison of Alternatives

Language in the tables suggest technical impracticability is assumed. Please see my attachment with objectionable language removed.

TABLE 13. Comparison of Alternatives, 2986 and 3000 Oakmead Village Court, Santa Clara, California

	Alternative I No Action	Alternative II Institutional Controls and Ground Water	Alternative III Ground Water Extraction and GAC Treatment	Alternative IV Ground Water Extraction and Oxidation/ Reduction Treatment	Alternative V Ground Water Extraction and Biological Treatment
1. Compliance With ARARs					
- Chemical Specific	Would take several decades or longer to achieve clean-up standards	Would take several decades or longer to achieve clean-up standards	Would be achieved ~~to the extent technically practicable~~. Clean-up standards likely would be achieved in approximately 10 to 12 years	Would be achieved ~~to the extent technically practicable~~. Clean-up standards likely would be achieved in approximately 10 to 12 years	Would be achieved ~~to the extent technically practicable~~. Clean-up standards likely would be achieved in approximately 10 to 12 years
- Action Specific	No action	No action	Complies with surface water discharge permit requirements	Complies with surface water discharge permit requirements; wastes would be handled in accordance with applicable laws	Complies with surface water discharge permit requirements
- Location Specific	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
2. Short Term Effectiveness					
- Protection of Community	No additional risks. Does not prevent the use of the affected ground water	No additional risks. Prevents the use of affected ground water as a drinking water source	No additional risks. The plume would be contained	No additional risks. The plume would be contained	No additional risks. The plume would be contained
- Protection of Workers	No additional risks	No additional risks	No additional risks	No additional risks	No additional risks
-Environmental Impacts	Discharge of impacted ground water to nearby creeks and/or SF Bay unlikely. Current impact probably negligible	Discharge of impacted ground water to nearby creeks and/or SF Bay unlikely. Current impact probably negligible	The plume would be contained. No impact	The plume would be contained. No impact	The plume would be contained. No impact
- Approximate Time Until Clean-up Standards Are Met	Several decades or longer	Several decades or longer	10 to 12 years	10 to 12 years	10 to 12 years

TABLE 13. Comparison of Alternatives, 2986 and 3000 Oakmead Village Court, Santa Clara, California (continued)

	Alternative I No Action	Alternative II Institutional Controls and Ground Water	Alternative III Ground Water Extraction and GAC Treatment	Alternative IV Ground Water Extraction and Oxidation/ Reduction Treatment	Alternative V Ground Water Extraction and Biological Treatment
3. Long Term Effectiveness and Permanence					
- Magnitude of Residual Risk	Will not change current level of risk, but level of risk will decrease with time. Affected ground water will be above clean-up standards for several decades or longer	Will not change current level of risk, but level of risk will decrease with time. Affected ground water will be above clean-up standards for several decades or longer	Ground water will eventually be restored to safe drinking water standards, ~~if technically possible~~	Ground water will eventually be restored to safe drinking water standards, ~~if technically possible~~	Ground water will eventually be restored to safe drinking water standards, ~~if technically possible~~
- Adequacy of Controls	No controls involved	Adequate to prevent potential exposure to humans	Adequate to prevent potential exposure to humans	Adequate to prevent potential exposure to humans	Adequate to prevent potential exposure to humans
-Permanence of Remedial Action	Permanent	Permanent	Permanent	Permanent	Permanent
- Effectiveness in Achieving Remedial Action Objectives	Remedial objectives will be met in several decades or longer by natural attenuation processes	Remedial objectives will be met in several decades or longer by natural attenuation processes	Remedial objectives will be met ~~to the extent technically feasible~~	Remedial objectives will be met ~~to the extent technically feasible~~	Remedial objectives will be met ~~to the extent technically feasible~~
4. Reduction of Toxicity, Mobility and Volume through Treatment					
-Amount of Hazardous Material Treated	None	None	Approximately 2,050,000 gallons affected ground water treated per year. Greater than 99 percent VOC removal prior to discharge	Approximately 2,050,000 gallons affected ground water treated per year. Greater than 99 percent VOC removal prior to discharge	Approximately 2,050,000 gallons affected ground water treated per year Greater than 99 percent VOC removal prior to discharge

HELLER, EHRMAN, WHITE & McAULIFFE
ATTORNEYS
A PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

525 UNIVERSITY AVENUE
PALO ALTO, CALIFORNIA 94301-1908
FACSIMILE (415) 324-0638
TELEPHONE (415) 326-7600

333 BUSH STREET, SAN FRANCISCO, CALIFORNIA 94104-2878
CABLE HELPOW TELEX 184 996 FACSIMILE (415) 772-6268
TELEPHONE (415) 772-6000

701 FIFTH AVENUE
SEATTLE, WASHINGTON 98104-7098
FACSIMILE (206) 447-0849
TELEPHONE (206) 447-0900

555 SOUTH FLOWER STREET
LOS ANGELES, CALIFORNIA 90071-2308
FACSIMILE (213) 614-1868
TELEPHONE (213) 689-0200

1300 S.W. FIFTH AVENUE
PORTLAND, OREGON 97201-5696
FACSIMILE (503) 241-0950
TELEPHONE (503) 227-7400

RICHARD L. GRIFFITH
SPECIAL COUNSEL
DIRECT DIAL (415) 772-6178

June 17, 1991

10401-0001

Via Hand Delivery

Mr. Stephen I. Morse
Chief
South Bay Toxics Division
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Comments on Tentative Order
for Combined Micro Storage Corporation\
Intel Magnetics Site, Santa Clara

Dear Mr. Morse:

Enclosed please find the comments of Campeau Corporation and Campeau Corporation California on the Tentative Order for the Micro Storage Corporation/Intel Magnetics Superfund Site. We would appreciate the opportunity to discuss these comments with you and your staff. Greg Bartow has tentatively indicated that we could meet on June 20 at 10:00 a.m.

Thank you for consideration of our comments.

Sincerely,

Richard L. Griffith

cc: Greg Bartow,
Regional Board (w/encls.)

JONATHAN S. LEO
RICHARD L. GRIFFITH
WALTER E. RUSINEK
HELLER, EHRMAN, WHITE & McAULIFFE
333 Bush Street
San Francisco, CA 94104-2878
Telephone (415) 772-6000

Attorneys for Campeau Corporation and Campeau Corporation California

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION

MICRO STORAGE CORPORATION/ INTEL MAGNETICS SUPERFUND SITE	COMMENTS ON THE REVISED TENTATIVE ORDER FOR THE FINAL REMEDIAL ACTION PLAN
File No. 2189.8305 (GWB)	

Campeau Corporation ("Campeau") and Campeau Corporation California ("Campeau California") (jointly referred to herein as "Campeau Corporations") hereby submit their comments on the Tentative Order for the final remedial action plan at the Combined Micro Storage Corporation/Intel Magnetics Site, Santa Clara ("Site"). These comments are directed primarily to the proposal to include the Campeau Corporations as secondarily responsible in the event that Kim Camp No. III fails to comply with the final order. (Letter from Stephen I. Morse dated April 16, 1991).[1]

[1] There has been insufficient time for the Campeau Corporations, as new parties to this proceeding, to review and comment on the proposed remedial action plan.

SUMMARY OF COMMENTS

Campeau Corporation cannot lawfully be named as a responsible party under applicable law merely because it is a parent corporation of Campeau California. Neither can it be liable as a responsible party under traditional principles of corporate law because no justification exists for piercing the corporate veil. Campeau California should not be named as a responsible party in the order because (a) it has already contributed $300,000 to an escrow account dedicated to remediation of the Site administered by the Site's owner; (b) Westall Corporation (general partner of the Site's owner) has agreed to be responsible for any additional remediation costs; and (c) it is protected from enforcement of a money judgment by the bankruptcy laws. Finally, Campeau Corporation and Campeau California hereby formally request that the Regional Board add several responsible parties to the Order.

There is absolutely no legal justification for holding Campeau Corporation secondarily responsible because it is the "parent company of Campeau Corporation California." This proposed Finding 1 is in clear violation of principles of corporate liability and the Board's statutory authority. Furthermore, as the attached affidavit demonstrates, there is no basis whatsoever for ignoring the independent corporate structures and holding Campeau Corporation liable. As stated by the United States Fifth Circuit Court of Appeals, construing parent corporate liability principles in the CERCLA context, to hold a corporation liable merely by virtue of being a parent

corporation "would dramatically alter traditional concepts of corporation law." Joslyn Manufacturing Co. v. T.L. James & Co., Inc., 893 F.2d 80, 82 (5th Cir. 1990). For these reasons, Campeau Corporation cannot lawfully be named as a discharger secondarily responsible for implementing remedial action.

For several reasons it is extremely unfair to hold Campeau California secondarily responsible. It is no longer a partner in the Kim Camp No. III partnership that owns the Site, and it has already paid a significant amount for cleanup of the contamination that it had no part in creating. Campeau California's partnership interest was purchased by Westall Corporation pursuant to an Agreement for Purchase and Sale of Partnership Interest dated June 30, 1989 as amended ("Purchase Agreement"). See Declaration of Christine A. Anderson (Mrs.), Ex. A, attached hereto and incorporated herein by reference. Campeau California no longer has any interest in Kim Camp No. III or responsibility for its liabilities. In addition, pursuant to the Purchase Agreement, Campeau California has contributed $300,000 to a $600,000 escrow account for environmental remediation and abatement activities at the Site. This account is being administered by Kim Camp No. III to perform remedial action at the Site. Westall agreed to be solely responsible for any environmental liabilities at the Site exceeding the escrow amount. Anderson Decl., Ex. A, paras. 8 and 10.2.

The Regional Board has discretion to consider these issues of fairness in exercising its enforcement authority at the Site. This type of indemnity agreement has been considered

Kenkichi Ishiguro -- Chief Financial Officer/Secretary
Omron Tateisi Electronics, Co.
Administrative Section
9th Floor, Osaka
Center Building
4-68
Kitakyutaro-chu, Higashi-ku
Osaka 541 Japan

Charles Kim -- Director
200 Old Blossom Hill Road
Los Gatos, California 95030

In addition, it is our understanding that the Purchase Agreement with Westall Corporation has been assigned to Kimball Small Partners, L.P., a California limited partnership, which is now a general partner in Kim Camp No. III. Anderson Decl., Ex. A. It should also be named as a secondarily responsible party. Its address is Kimball Small Partners, L.P., Attention: Mr. Kimball W. Small, 121 Park Center Plaza, Suite 800, San Jose, California 95113.

DISCUSSION

A. Campeau Corporation May Not Be Held Responsible Merely as a Parent Corporation, and There is No Basis for "Piercing the Corporate Veil."

The Board proposes to hold Campeau Corporation secondarily responsible "because it is the parent company of Campeau Corporation California and may be held liable for its subsidiaries' debts." Letter of Stephen Morse, April 16, 1991. There is no authority in state or federal law for holding a corporation liable solely on the ground that it is a parent of an arguably otherwise liable subsidiary.[2] No court or agency has

[2] In fact, the direct parent of Campeau California is Federated Stores, Inc.("FSI"), formerly known as Campeau Corporation (U.S.), Inc., which owns all of the stock of Campeau California. (FSI is a wholly-owned

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DISCUSSION

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gone so far in holding parent corporations liable as the revised Tentative Order proposes for Campeau Corporation.

Both State Water Resources Control Board ("State Board") decisions and analogous CERCLA cases recognize that a parent corporation may not be held responsible for a subsidiary's cleanup liabilities. An exception is made when there is a basis under traditional corporate legal principles for "piercing the corporate veil." There are no such grounds in this case.[3] The State Board follows the general principle that "a parent corporation is not liable for the actions of its subsidiary," although it has held that the "corporate veil may be pierced if it is determined that the parent is really the alter ego of the subsidiary." Petitions of Spitzer, et al., Order No. WQ 89-8 (May 16, 1989). In Spitzer, the State Board noted that the corporate entity will be disregarded only when it is "so organized and controlled and its affairs are so conducted, as to

---

subsidiary of Campeau Corporation and has also filed a Chapter 11 bankruptcy petition.). Anderson Decl.

[3] There are a few CERCLA cases holding that a parent company may be held liable as an "operator" of a facility under 42 U.S.C. § 9607(a), but such cases have involved parent companies actively involved with a subsidiary which actually operated the site and caused the discharges of hazardous substances. Those cases are inapplicable here because the allegation is that Kim Camp No. III and Campeau California are responsible parties, not as operators or dischargers themselves, but as owners of the Site during Micro Storage Corporation's operations and discharges. See, e.g., United States v. Kayser-Roth Corp., Inc., 910 F.2d 24 (1st Cir. 1990); Idaho v. Bunker Hill Co., 635 F. Supp. 665 (D. Idaho 1986).

make it merely an instrumentality, agency, conduit or adjunct of another corporation."

A similar test is followed by federal courts under CERCLA and by California courts in any circumstance in which parent corporations are sought to be held liable for a subsidiary's obligations. See, e.g., Joslyn Manufacturing Co., supra; In re Acushnet River & New Bedford Harbor Proceedings, 675 F. Supp. 22, 33 (D. Mass. 1987); Institute of Veterinary Pathology, Inc. v. California Health Laboratories, Inc., (1981) 116 Cal. App. 3d 111, 119. As stated in the leading Ninth Circuit decision on piercing the corporate veil:

> The court must find that there is such a unity of interest in ownership between the corporation and the shareholder that the two no longer exist as separate entities [citation omitted]. Second, it must be shown that failure to disregard the corporation would result in fraud or injustice.

See Moore v. Hull and Moreland Engineering, 605 F.2d 1105, 1111 (9th Cir. 1979).

In the Institute of Veterinary Pathology case, supra, the court did not hold the parent corporation liable even though (a) the parent owned 100% of the subsidiaries; (b) there were interlocking directors and officers of the entities; (c) the minute and stock books of the subsidiaries were kept by the parent's secretary at its New York corporate headquarters; (d) there were consolidated financial statements from the subsidiaries in the parent's annual report; and (e) there was other evidence establishing inter-corporate connections. 116 Cal. App. 3d at 119. The court found that the facts failed to

"set forth any direct evidence of [the parent's] manipulative control of its subsidiaries which would require imposition of liability." Id. at 120.

As with the parent-subsidiary relationship in Veterinary Pathologies, Campeau California and Campeau Corporation have been operated as separate corporate entities and there has been no manipulative control, as evidenced in part by the following:

1. Personnel of Campeau Corporation have never been placed in Campeau California's office, and day-to-day management decisions have not been controlled by Campeau Corporation.

2. Campeau Corporation has never been involved in any way in a centralized cash management system involving Campeau California. Until the petition in bankruptcy was filed, all banking and accounting of Campeau California was maintained separately in California.

3. Campeau Corporation has never had any involvement in the management of the Site. The decision to lease the property comprising the Site to Micro Storage Corporation was not made by Campeau Corporation but was made by the partners in Kim Camp No. III.

4. Campeau California's business dealings with its tenants and purchasers were customarily handled by its own employees and officers and not by Campeau Corporation.

5. Blanket insurance policies provided by Campeau Corporation for Campeau California were paid for by Campeau California.

See Anderson Decl.

In conclusion, there is no legal authority for holding a corporation liable solely because of its status as a parent of a responsible company. Furthermore, Campeau Corporation was not operated as an alter ego of Campeau California. Campeau California's creditors and the Regional Board have not been defrauded. No other creditor of Campeau California has sought to hold Campeau Corporation liable for Campeau California's debts. Campeau Corporation cannot lawfully be held liable for Campeau California's obligations.

B. **The Board Should Exercise its Discretion and Not Name Campeau California as a Secondarily Responsible Party Because It Has Paid Its Fair Share and Another Party Has Agreed to Be Solely Responsible.**

The Board's proposal names Campeau California as a discharger in this order because it is a general partner of Kim Camp No. III and may be held liable for partnership debts. Proposed Finding 1. In fairness, Campeau California should not be named as a discharger in the final order. It has not been a partner in Kim Camp No. III since 1989. The Purchase Agreement with Westall Corporation specifically provides that Campeau California and Westall Corporation would each deposit $300,000 (for a total of $600,000) into an escrow account to be used for the "cleanup, remediation and abatement" of contamination at the Site. The Purchase Agreement further provides that in the event the escrow amount is not sufficient to complete the cleanup, "buyer [Westall Corporation] shall be solely responsible for the payment of any such excess costs and expenses." Anderson Decl., see Ex. A, para. 8. Similarly, the Purchase Agreement provides

that Westall Corporation will indemnify and defend Campeau California against any and all claims arising out of discharges of hazardous substances. Anderson Decl., Ex. A, para. 10.2. Those types of indemnity agreements have been recognized and deferred to by courts in CERCLA cases to apportion liability among responsible parties. See, e.g., Ecodyne Corp. v. Shah, 718 F. Supp. 1454, 1458 (N.D. Cal. 1989).

The Regional Board has discretion to consider these kinds of equitable factors in fashioning the final order and to remove Campeau California as a responsible party. Even though the decision has been made not to include a nonbinding preliminary allocation of responsibility ("NBAR") in the final order, the Board's authority to issue NBARs supports the conclusion that the Board has the discretion to decide that it would be unjust to name Campeau California as a responsible party at this Site.

C. **The Automatic Stay Provision of the Bankruptcy Code Protects Campeau California from the Enforcement of Money Judgments for Cleanup Liabilities.**

As the Regional Board has been previously notified, Campeau California is a debtor and debtor in possession in a Chapter 11 bankruptcy case currently pending in the United States Bankruptcy Court for the Northern District of California at San Francisco. The case was voluntarily initiated on January 14, 1990, and is referenced by Case No. 3-90-00132-LK. Pursuant to federal law, the initiation of a bankruptcy generally operates as a stay, applicable to all entities, of "the commencement or continuation . . . of a judicial, administrative, or other action

or proceeding against the debtor that was or could have been commenced before the commencement of the case. . . ." 11 U.S.C. § 362(a)(1). This provision is referred to as the "automatic stay".

While the Regional Board is at least arguably excused from the automatic stay by the police or regulatory power exception articulated in subsections 362(b)(4) and (5) of the Bankruptcy Code, even under the police or regulatory power exception, the Regional Board is expressly prohibited from trying to enforce a "money judgment" against Campeau California. Campeau California will assert the automatic stay should the Regional Board attempt to use its authority to enforce such a "money judgment."

Additionally, the police or regulatory power exception to the automatic stay does not apply to an effort to adjudicate financial responsibility between nongovernmental units. Consequently, to the extent the Board's proceedings attempt to grant nongovernmental units' claims against Campeau California, Campeau California will assert the existence of the automatic stay.

D. The Officers and Directors of Micro Storage Corporation Should Be Named as Primarily Responsible Parties.

The persons named above who were officers and directors of Micro Storage Corporation should be included as primarily responsible parties in the final order. The Hazardous Substance Account Act incorporates the CERCLA definition of liable persons.

Cal. Health & Safety Code § 25323.5. CERCLA cases have uniformly held that officers and directors who were in a position to have prevented or abated the discharges of hazardous substances are personally liable. See, e.g., United States v. Northeastern Pharmaceutical & Chemical Co., 810 F.2d 726, 743 (8th Cir. 1986); Kelley v. Thomas Solvent Company, 727 F. Supp. 1554 (W.D. Mich. 1989). It is our understanding that the officers and directors of Micro Storage Corporation exercised a management role at the Site and could have prevented the discharges of hazardous substances.

For the foregoing reasons, Campeau Corporation and Campeau Corporation California respectfully request that the Regional Board not name them as secondarily responsible parties in the final order and that the responsible parties named herein be added.

Dated: June 12, 1991

HELLER, EHRMAN, WHITE & McAULIFFE

By: _____
Richard L. Griffith
Attorneys for Campeau Corporation and Campeau Corporation California

INTEL CORPORATION
1900 Prairie City Road
Folsom, CA 95630
(916) 351-8080

6

June 17, 1991

Mr. Gregory Bartow
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster, Suite 500
Oakland, CA 94612

SUBJECT: Comments on the March 28, 1991 "Tentative Order Proposed Final Remedial Action Plan and Site Cleanup Requirements" for: Kim Camp III, Micro Storage Corp., Intel Corp., and 3000 Oakmead Village Dr., Ltd., and on the May 1, 1991 "Notice of Intent to Revise Tentative Order . . . ".

Dear Greg:

Attached are Intel's comments for the subject Order.

Thank you for meeting with us on Thursday, June 13th.

Sincerely,

Terry McManus
by MLS

Terrence J. McManus, P.E.
Manager, Corp. Environmental, Health & Safety

TJM:sc
Enclosure

Intel Corporation's Comments on the March 28, 1991 Tentative Order Proposed Final Remedial Action Plan and Site Cleanup Requirements for the Combined Micro Storage Corp., Intel Magnetics Site as revised May 1, 1991.

1) Page 1, Item 1, Paragraph 2:

This paragraph states that "chemicals used by MSC included Freon-113, which has been found in the ground water at the MSC site". The "Tenant Environmental Risk Assessment Questionnaire" filled out by K. Lan of Micro Storage and included in Appendix D of the RI/FS prepared by J.V. Lowney Associates for Kim Camp III (KCIII) indicates that "nonflam./chlorinated solvent[s]" were also used. This information should be included in the Order.

2) Page 2, Item 6, Paragraph 2:

Line 7 quotes the September 1988 Jacobs Engineering report as saying "a secondary source of Freon 113 and possibly TCA is believed to exist at the Intel Magnetics site...". This conclusion is based solely on "initially high concentration levels of Freon and TCA when wells IM-E1 and IM-E2 first started operations" (Jacobs Engineering, "Review of Contaminant Plume for Intel Magnetics Site", Sept. 1988). However, initial concentrations of TCA in these wells were not high in comparison with upgradient wells. TCA was detected in the two initial samples collected from IM-E1 on December 12, 1984 at 80 and 370 ppb, for an average concentration of 225 ppb. A significantly higher TCA concentration of 380 ppb was detected in a sample collected the next day from upgradient well IM-2, clearly indicating an upgradient source. While the initial sample collected from IM-E2 in January 1986 did have a fairly high TCA concentration (280 ppb) subsequent samples collected just two and three months later showed TCA concentrations of less than 10 ppb and 61 ppb, respectively. The average TCA concentration detected in IM-E2 during 1986 was only 44 ppb, while it was 78, 65 and 133 ppb in upgradient wells IM-2, IM-11 and IM-10, respectively.

Since the Jacob's Engineering report was submitted, several reports have been submitted to the WQCB which attribute all the TCA to a source on the Micro Storage site. These documents should be mentioned in the Order, and Intel suggests that the following text be added before the third paragraph on page 3 of the Tentative Order:

> In January 1991, KCIII submitted the RI for the MSC/IM site (J. V. Lowney & Associates, 1991). TCE isoconcentration contour maps in the RI (Figures 29 through 37) confirm the Jacobs Engineering conclusion that all the TCE at the site originated at the MSC site. Furthermore, the TCA maps (Figures 38 through 46) indicate that all the TCA also originated at the MSC site. Two reports submitted to the RWQCB by Intel also present evidence against TCE and TCA sources at the Magnetics site (Weiss Associates, June 12, 1990 and March 1, 1991). These two Intel reports also state that the secondary Freon-113 source located on the Magnetics site was removed during the 1985 tank excavation and that ground water impacted by this source had been cleaned up to very low concentrations (<15 ppb over most of the site and <90 ppb in the tank excavation backfill) by early 1987. They conclude that the amount of Freon-113 remaining from the Magnetics source is insignificant compared to that from the upgradient source.

3) Page 3, Item 6, Paragraph 4:

This paragraph proposes to elevate Intel to primary discharger status.

This paragraph states that "it would be unfair to maintain Intel as a secondarily responsible party during the long-term cleanup phase since Intel was responsible for at least a portion of the groundwater pollution at IM". Intel strongly disagrees with this proposal and statement A technical report has been prepared by Weiss Associates that addresses the "Assessment of Responsibility of Intel for Future Cleanup" at this site. The pertinent points of this report (attached as Attachment I) are summarized below:

a) Intel contributed, at most, only a small fraction of the Freon-113 to the ground water plume. All other constituents (including TCE, TCA, PCE and their breakdown products) and at least 99% of the Freon-113 in the plume were contributed by upgradient sources (see "Addendum to the Final Remedial Investigation", Intel Corporation, March 1, 1991).

b) As mentioned under Comment 2 above, Intel removed the potential source of Freon-113 and cleaned up impacted ground water to very low concentrations by early 1987.

c) As of March 1991, Intel had spent about $450,000 on investigations and remediation at the IM site. It is estimated that at least $173,000 of this was spent as a direct result of the upgradient Micro Storage source. This figure does not take into account the costs incurred by Intel from early 1985 to early 1987 to remediate a small Freon-113 plume originating from the IM site. While it is unknown how much the Micro Storage dischargers have spent, it is undoubtedly much less than Intel has spent in total and significantly less in proportion to the respective source contributions. Intel has been investigating and remediating the site since 1982, while Micro Storage has only been involved since late 1988.

d) All of the excess cancer risk associated with the Micro Storage/Intel Magnetics site, as calculated by Clement Associates and presented in the Baseline Public Health Evaluation (BPHE) and on Page 8, Item 18 of this Order, is attributed to chemicals (primarily TCE and 1,1-DCE) originating from the MSC site. Without this excess cancer risk it is very unlikely that the combined MSC/IM site would even be on the NPL.

e) Furthermore, as shown in Table SMP-2 of this Order, the cleanup standards for TCE, PCE and the breakdown products of TCE and/or TCA are what drive the current cleanup efforts at the site. As stated on Page 13, Item 25 of the Order, TCE, with a cleanup standard of 5 ppb, will most likely be the limiting factor in achieving the overall cleanup goals. All of these compounds are associated only with the MSC source. The 1,200 ppb cleanup goal for Freon-113 has already been achieved for the entire plume, with the possible exception of the Micro Storage source area monitored by well MW-3.

What seems unfair is that Intel is expected to be a primarily responsible party when it has remediated any contamination originating from the IM site and contributed much more than its fair share for the area wide plume cleanup.

Therefore, Intel requests that it not be identified as a primarily responsible party with regard to the MSC site (source area) and, further, for the chemicals (pollutants) that have migrated or will migrate downgradient from that site.

Intel recognizes and accepts primary responsibility for the remediation of the IM site (source area) and for any downgradient migration of the chemicals (pollutants) from the IM site. Intel believes and Weiss Associates has clearly proven in their several reports on the subject that Intel has already cleaned up the source area at the IM site, and, further, has already cleaned up any chemicals (Freon-113) that migrated downgradient.

Therefore, Intel's responsibility for any further activities relating to the IM site source area and for the downgradient migration of chemicals from that source should be secondary to and only required by the failure of the MSC dischargers to perform as the primarily responsible party.

Intel requests that Paragraphs 3 through 5 on Page 3 be deleted and replaced with the following:

> Order No. 89-086 named Intel and OVDL as secondarily responsible parties. This was done because Intel had remediated the identified source of Freon-113 at the IM site and because any amount of Freon-113 remaining in ground water attributable to the former IM source area was (and is) well below the 1,200 ppb cleanup goal for Freon-113 set forth in this Order. If KCIII should determine that additional source areas exist at the IM site which are contributing to the plume that is being remediated pursuant to this Order, the Executive Office may elevate Intel to the status of a primarily responsible party.
>
> This Order provides that Intel will continue to be a secondarily responsible party for the portion of the plume attributable to unremediated source areas presently located at the IM site. As stated in Provision C.3 of this Order, "[i]f KCIII demonstrates to the satisfaction of the Executive Officer that a newly identified actual, and unremediated source(s) of chemicals (pollutants) presently exist at the IM site and presently contribute to the plume being remediated pursuant to this Order, the Executive Officer may elevate Intel to a primarily responsible party for any newly identified IM source areas and for the chemicals (pollutants) originating therefrom, Intel shall comply with the provisions of this Order which pertain to the IM site within 60 days of the determination of the Executive Officer and actual notice to Intel. Intel shall not be responsible for any activities associated with or arising from chemicals (pollutants) originating from the MSC site or from any other site which Intel did not own or operate."
>
> This Order provides that OVDL is a tertiarily responsible party for the portion of the plume attributable to the IM site. As stated in Provision C.4 of this Order, "[i]f KCIII demonstrates to the satisfaction of the Executive Officer that a newly identified, actual, and unremediated source(s) of chemicals (pollutants) presently exist at the IM site and presently contribute to the plume being remediated pursuant to this Order, the Executive Officer may elevate OVDL to a secondarily responsible party for any newly identified IM source areas and for the chemicals (pollutants) originating therefrom. If Intel fails to comply with the provisions of this Order which pertain to the IM site, within 60 days of the determination of the Executive Officer and actual notice to OVDL, OVDL shall comply with the provisions of this Order which pertain to the IM site. OVDL shall not be responsible for any activities associated with or arising from chemicals (pollutants) originating from the MSC site or from any other site which OVDL did not own or operate."
>
> This Order provides that Kimball Small Investments III, Westall Corporation, Campeau Corporation California, and Campeau Corporation are secondarily responsible for all

discharges. As stated in Provision C.5 of this Order, "[i]f KCIII fails to comply with any of the provisions of this Order, within 60 days of the Executive Officer's determination and actual notice to Kimball Small Investments III, Westall Corporation, Campeau Corporation California, and Campeau Corporation, as general partners or parent company, shall comply with the provisions of this Order."

To incorporate this change, Provision C of the Order should be amended as follows:

1. "The primarily responsible discharger (KCIII) shall . . . ."

2. "The primarily responsible discharger (KCIII) is required to operate the ground water extraction system in a coordinated effort with remedial activities at the MCC site . . . ."

3. "If KCIII demonstrates to the satisfaction of the Executive Officer that a newly identified, actual, and unremediated source(s) of chemicals (pollutants) presently exist at the IM site and presently contribute to the plume being remediated pursuant to this Order, the Executive Officer may elevate Intel to a primarily responsible party for any newly identified IM source areas and for the chemicals (pollutants) originating therefrom. Intel shall comply with the provisions of this Order which pertain to the IM site within 60 days of the determination of the Executive Officer and actual notice to Intel. Intel shall not be responsible for any activities associated with or arising from chemicals (pollutants) originating from the MSC site or from any other site which Intel did not own or operate."

4. "If KCIII demonstrates to the satisfaction of the Executive Officer that a newly identified, actual, and unremediated source(s) of chemicals (pollutants) presently exist at the IM site and presently contribute to the plume being remediated pursuant to this Order, the Executive Officer may elevate OVDL to a secondarily responsible party for any newly identified IM source areas and for the chemicals (pollutants) originating therefrom. If Intel fails to comply with the provisions of this Order which pertain to the IM site, within 60 days of the determination of the Executive Officer and actual notice to OVDL, OVDL shall comply with the provisions of this Order which pertain to the IM site, OVDL shall not be responsible for any activities associated with or arising from chemicals (pollutants) originating from the MSC site or from any other site which OVDL did not own or operate."

5. "If KCIII fails to comply with any of the provisions of this Order, within 60 days of the Executive Officer's determination and actual notice to Kimball Small Investments III, Westall Corporation, Campeau Corporation California, and Campeau Corporation, as general partners or parent company, shall comply with the provisions of the Order."

6. "The primarily responsible discharger (KCIII) . . . ."

[Other references to Provision C of this Order (e.g. in the Findings) should be reviewed and, if necessary, revised.]

Any other reference in the Order, actual or implied, to Intel as a primarily responsible discharger should be revised in accordance with these findings.

4) Page 3, Item 7:

As presented in the Weiss report and supported by the Jacobs report, TCE is not attributable to the IM site. TCE was detected in upgradient well IM-2 in late 1982 which is 3 years prior to the leasing of the MSC site by Micro Storage Corp. Therefore, previous owner(s) and/or operator(s) of the MSC site must be evaluated as potentially responsible parties. To the extent such parties are identified, this Order should be revised to include them as primary or secondary responsible parties with the MSC site carrying over all requirements of this Order. Intel requests that the finding be reworded as follows:

> National Priority List "Superfund": The IM site was placed on the National Priority List (NPL) in May 1986. In 1988 the MSC site was included with the IM site as one combined Superfund site. Pursuant to Health and Safety Code Sections 25356.1 (c) and (d) the only identified responsible parties associated with the release of pollutants to the subsurface at this location are MSC, KCIII, Kimball Small Investments III, Westall Corporation, Campeau Corporation California, and Campeau Corporation, Intel, OVDL and potential, prior owners/operators of the MSC site. KCIII is required to submit reports for the combined site. KCIII has accepted responsibility for the site cleanup for the MSC portion of the combined MSC/IM Superfund site and the plume that has migrated downgradient as defined in the RI report. Since this is the only remaining work to be completed at the combined MSC/IM site, KCIII is the primary responsible party. Intel has accepted responsibility for the IM portion of the site and on the basis of information presently available to the Executive Officer, has completed responsibilities.

5) Page 5, Item 10, Paragraph 2:

The last sentence states "the only chemicals detected in the A-zone above drinking water standards were TCE, 1,1-DCE and 1,2-DCE...". None of these compounds can be attributed to an Intel Magnetics source. This should be stated in the Order.

6) Page 5, Item 11.1:

The Order must include the factual finding that the underground tank formerly located at the IM site was tested both in the ground and after its removal and was found to not have any leaks. Intel believes that specific tank test reports have been submitted to the RWQCB in the past. Intel will send additional copies under separate cover.

7) Page 5, Item 11.2, Paragraph 1:

The last sentence states "chemicals used by MSC included Freon 113, which has been found in the groundwater at the MSC site". See Comment 1 above.

8) New Tasks 1 & 2 under Provisions C.4 (see Page 18) and revised Attachment A:

In the May 1, 1991 "Notice of Intent to Revise Tentative Order..." from the WQCB, two new tasks and a revised version of Attachment A for the Order are presented. This Attachment and these tasks deal with plume definition in the vicinity of wells MMW-2,5, and 9 on the Metropolitan property. The Attachment states "KCIII believes that the pollution detected in MMW-7 is from the MSC/IM site and the pollution detected in MMW-2,5 and 9 is from the

Metropolitan site. Metropolitan, on the other hand, believes that the pollution in MMW-2,5,7 and 9 is all from the combined MSC/IM site". Although the Attachment does not state the WQCB's position, it does state "Board staff interpret the water quality data differently than is shown in the RI" (KCIII's/Lowney's interpretation), implying that they agree with the Metropolitan interpretation. The Lowney RI report is supported by the following facts:

1) MMW-2,5 and 9 are nearly directly downgradient of MMW-10. Groundwater samples collected from MMW-10 contain significantly higher TCE concentrations than any collected from MMW-2, 5 and 9. MMW-2, 5 and 9 are almost directly cross-gradient of the MSC/IM TCE source area.

2) In 1990, concentrations of TCE as high as 22 ppb were detected in MMW-2, 5 and 9, while the other components of the MSC/IM plume (TCA and Freon-113) were not detected at all.

3) Only TCE and 1,2-DCE are typically detected in the upgradient Metropolitan well MMW-10. This is also true for wells MMW-2,5 and 9.

The new Tasks 1 and 2 require the parties with primary responsibilities for the MSC/IM site to install at least two new monitoring wells between the known northwest extent of the MS/IM plume and the known northeast extent of the Metropolitan plume. At a later date, Metropolitan will be required to install at least one new well between MMW-10 and MMW-2 to better define its plume. Given the reasons listed above, we propose that the RWQCB require Metropolitan to install three (3) well(s) with at least one well upgradient of MMW-10 (since the source of the TCE plume has not been identified). If the results from the new wells indicate that the TCE in wells MMW-2,5 and 9 is from the Metropolitan source, then Metropolitan should complete the rest of their plume's definition. If the new wells implicate the MSC plume, then KCIII should install the new wells. Intel should not be assigned any responsibility for this investigation since the data so clearly demonstrates that the chemicals could not have originated at the IM (3000 Oakmead) site.

9) Page 22, Provision 7:

For years Intel has submitted reports for this site. Since 1989, KCIII has taken over the responsibility of submitting the required periodic monitoring reports to the Board. To eliminate the duplication of effort currently required by this provision, and in recognition of KCIII's primary responsibility, the reporting requirements should continue to be required only of KCIII, and not of Intel or any other party.

KIMBALL
SMALL
PROPERTIES

KIM

COPY VIA FAX
ORIGINAL VIA REGULAR MAIL

June 17, 1991

Mr. Stephen I. Morse
Chief, South Bay Toxics Division
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

Re: Tentative Order of Proposed Final Remedial Action Plan and Site Cleanup Requirements for Combined Micro Storage/Intel Magnetics Site

Dear Stephen:

We are in receipt of your letters of March 28, 1991, April 4, 1991, April 16, 1991 and May 1, 1991 regarding the referenced Tentative Order. On behalf of Kim Camp III, Kimball Small Investment III, Westall Corporation and Campeau Corporation California, we offer the following comments and request the following changes to the Tentative Order.

1. Finding 6, paragraph 5, page 3:
We object to the fact that Kim Camp III was named in a primary position in Order 89-086 "because Kim Camp III was found to be the primary source of the groundwater pollution". Kim Camp III is not and never has been a user of chemicals, and it has not caused any pollution. The fact that Kim Camp III began investigative work in 1987 is also irrelevant to primary vs. secondary status.

We would like this paragraph to acknowledge that Kim Camp III was erroneously named as a primarily responsible party in Order 89-086. At a minimum, the order should be rewritten to state that Kim Camp III is a responsible party solely due to its property owner status. All references to Kim Camp III as a polluter should be deleted.

2. Finding 6, paragraphs 6 & 7, page 3:
These paragraphs list the responsible parties in the Tentative Order and assign them primary or secondary status. We feel that there are three basic problems herein. First, we do not feel that the CRWQCB has named all responsible parties. Specifically, enclosed is a letter from J.V. Lowney & Associates dated April 23, 1991 identifying at least one additional responsible party, Micro Storage's predecessor as tenant of 2986 Oakmead Village Court, International Diagnostic Technology (IDT).

FAIRMONT PLAZA • 50 WEST SAN FERNANDO STREET • SUITE 1020 • SAN JOSE, CA 95113 • 408-998-1411 • 408-275-9430 (FACSIMILE)

2. Finding 6, paragraphs 6 & 7, page 3 (cont):
Although IDT has previously stated that they did not use TCE, Intel and Micro Storage have made similar claims as well. However, TCE was a common (un-named) component of many industrial products used by Intel and IDT when they occupied the IM/MSC site, and to a lessor degree, it was still a component of products used during Micro Storage's tenancy. Micro Storage not being able to account for all of its Freon 113 is not a valid reason that it was the one who spilled TCE. Intel, Micro Storage and IDT all used products containing TCE during their tenancy. They should jointly and severally be named as primary responsible parties.

The second problem is that Kim Camp III is named as a primarily responsible party. Kim Camp III is a passive property owner and should be named as a secondarily responsible party, just as you have named 3000 Oakmead Village Drive Limited. It is not appropriate to combine the 2986 Oakmead Village Court and 3000 Oakmead Village Drive addresses into one site, and then to assess the two property owners differently.

Lastly, the second sentence of paragraph 6 implies a lack of cooperation on the part of Kim Camp III. This, as you know, is not accurate. Kim Camp III has cooperated with the CRWQCB's investigation as soon as it was asked to do so in 1987. The sentence should be rewritten to reflect this fact. Actually, this sentence should be deleted because it is an inappropriate reason to name Intel as a primarily responsible party. Intel should be a primarily responsible party because it was a user of toxic chemicals, and it caused a release of these chemicals to occur on its property.

3. Finding 6, paragraph 8, page 3:
The last sentence is unclear as to whether you are referencing Order 89-017 or the Tentative Order when stating that Kim Camp III is a primarily responsible party. Although we feel it was wrong to give Kim Camp III primary status in Order 89-017, that Order is now rescinded, so we have no comment if this is your intent. However, if your reference is to the referenced Tentative Order, then this sentence should be removed for the reasons outlined in item 2 above.

4. Finding 7, page 4:
The last sentence of this paragraph states that "Intel and Kim Camp III have accepted responsibility for the site cleanup." This implies that Kim Camp III is prepared to proceed without regard to the responsibilities of others, especially those directly responsible for actual releases. This is absolutely not true. There is a track record of years of correspondence from Kim Camp III, both verbal and written, stating that Kim Camp III does not accept responsibility for site cleanup. This sentence should be deleted in its entirety.

5. Finding 10, paragraph 2, page 5:
   This paragraph implies that the VOCs from the combined Intel/Micro Storage site have impacted the B-Zone aquifer. This is not accurate. During the last 4 years, only one B-Zone sample has shown a trace level of contamination. This is most likely due to laboratory contamination. This paragraph should be modified accordingly or deleted.

6. Finding 11.2, paragraph 2, page 5:
   The Tentative Order states "Historically, the highest levels of groundwater pollution are beneath the parking lot of the MSC site." This statement is incorrect. During the early to mid 1980's, the highest levels of groundwater pollution were detected at the former Intel site. In addition, the highest levels of Freon 113 recorded were from the Intel extraction well. This paragraph should be modified to correctly state these facts.

7. Finding 19, paragraphs 2 & 3, page 9:
   This portion of the Tentative Order takes exception by the CRWQCB to certain sections of the Remedial Investigation (RI), prepared by J.V. Lowney & Associates on behalf of Kim Camp III, dealing with the Metropolitan Corporate Center site (MCC). The CRWQCB has issued Attachment A to the Tentative Order, revised per your May 1, 1991 letter, regarding this point. The following comments refer to paragraph 4 of Attachment A. Figure 2, a map of well locations in and around the site, is enclosed herein for reference.

   The first sentence states that "the plume" is not fully defined between the former location of IM-8 (near MMW-7) and MMW-9. We assume "the plume" refers to the combined IM/MSC plume. The location that you are referring to is in the middle of the MCC site, which, as all groundwater data clearly indicates, is cross-gradient to the IM/MSC site. Therefore, "the plume" does not extend into this area in question.

   Sentences two, three and four describe the CRWQCB requests, and Kim Camp III's decline of requests, to investigate this area. The reason for Kim Camp III's actions are simple. This area is clearly not affected by the IM/MSC plume due to its cross-gradient location.

   The CRWQCB acknowledges that there is at least one separate VOC plume emanating from the MCC site. Referring to Figure 2, it is clear by the number of wells installed to date that the IM/MSC site has been thoroughly researched, but this is not the case with the MCC site. Any investigative work on the MCC site should be carried out under the MCC Tentative Clean-up Order.

The proposed RI by J.V. Lowney & Associates contains an accurate description of the facts. Therefore, Attachment A to this Tentative Order should be deleted in its entirety.

8. Finding 23, pages 12 & 13:
Finding 23 is the selection by the CRWQCB of Remedial Alternative 3 from Finding 21. We feel that this alternative is contradictory and not in the best interest of the public. Specifically, 23.f indicates that:

> "The dischargers shall be required to file a deed restriction prohibiting the use of on-site shallow groundwater for drinking water and controlling other subsurface activities."

However, Finding 18, the Baseline Public Health Evaluation states:

> "Since the shallow groundwater from beneath the combined MSC/IM site is not currently used for drinking water supply, no current risk was identified at the combined MSC/IM site. Potential future health risks are based on exposures that could occur in the future if untreated shallow zone groundwater was used for human consumption and residential development occurred on the combined MSC/IM site."

If there is going to be a deed restriction placed upon the property as stated in Finding 23.f, then there is no public health risk per Finding 18. If there is no public health risk associated with the site, then in would not be in the public's best interest to spend State funds administering this site. Therefore, we feel that Remedial Alternative 2, a deed restriction with limited monitoring is the proper alternative.

Actually, it is not clear to us why residential development should be precluded from the site. There are other CRWQCB sites with similar groundwater pollution where residential development has occurred. Therefore, we would like the CRWQCB to consider this when negotiating with the property owners over the wording of the deed restrictions.

9. Finding 28, paragraph 2, page 14:

The first two sentences state that if groundwater extraction cannot meet drinking standards, then extraction will continue as long as "significant" quantities of chemicals are being removed. "Significant" needs to be defined or deleted. Sentence 4 gives criteria for curtailing groundwater extraction. If groundwater extraction meets these criteria, then it should be curtailed regardless of whether or not "significant" quantities of chemicals are being removed.

10. Section C.3, page 18:

This paragraph should be changed for the reasons stated in items 1 and 2 above to read:

> "If Intel, Micro Storage and IDT fail to comply with any of the provisions of this Order, within 60 days of the Executive Officer's determination and actual notice, 3000 Oakmead Village Drive Ltd and Kim Camp III, as landowners, shall comply with the provisions of this Order."

We appreciate the opportunity to submit our comments and we look forward to working with you and your staff toward a successful completion of this site. After you and your staff have reviewed the contents of this letter, we would like to sit down with you to understand your position on each item. We would also like to make the request that you send us copies of responses and correspondence to this Tentative Order from all other parties.

For your information, we are representing Kim Camp III, Kimball Small Investments III, Westall Corporation and Campeau Corporation California (but not Campeau Corporation) in regards to this Tentative Order. Please direct all correspondence to my attention accordingly. Thank you.

If you have any questions, please do not hesitate to give me a call.

Sincerely,

KIMBALL SMALL PROPERTIES

Stephen P. Belomy
Vice President, Development

Enclosure

cc: Roger Hacker (via fax)
Karl Morthole (via fax)
Glenn Romig (via fax)
Kim Small

S406

LOWNEY ASSOCIATES
Environmental/Geotechnical/Engineering Services

April 23, 1991
587-2Z, PA042305

KIM CAMP III
C/O KIMBALL SMALL PROPERTIES
50 West San Fernando Street, Suite 1020
San Jose, California 95113

RE: COMMENTS ON THE SOURCES OF VOCS IN SHALLOW GROUND WATER, 2986-3000 OAKMEAD VILLAGE COURT, SANTA CLARA, CALIFORNIA

Attention: Mr. Stephen Belomy

Gentlemen.

In accordance with your request, this letter presents our opinions on likely source(s) of contamination in the area based upon our experience at the 2986 - 3000 Oakmead Village Court site.

POTENTIAL SOURCE(S) OF CONTAMINATION

An underground tank was installed at the former Intel site in 1978 and reportedly was used to store waste solvents. As a result of a leak detection program for underground storage tanks initiated by the CRWQCB in 1982, ground water investigations detected VOCs beneath the site. Analysis of soil samples collected from above and near the waste solvent tank revealed several VOCs, including TCE, PCE, chloroform, benzene, 2-methylpentene, toluene, tetrahydrofuran, hexane, Freon 113, Freon 11, 1,2,4-trichlorobenzene, and 1,2,3-trichlorobenzene. In addition, VOCs were detected in A-Zone ground water sampled from several wells installed near the tank in 1982. In 1982, the plume extended approximately 500 to 600 feet in length and 300 to 400 feet in width from the former Intel site.

The 2986 Oakmead Village Court property is located immediately to the south and up-gradient of the former Intel site. This site was initially occupied by International Diagnostic Technology (IDT) from March 1979 to June 1984. This firm reportedly used the facility for offices and testing of electro-optical instruments, aqueous solution diagnostic test kits, and related medical devices. An assortment of small quantities of hazardous materials were reportedly used on-site by IDT.

Micro Storage Corporation occupied the site from January 1985 to December 1986 and used the facility for research and development and pilot manufacturing. Micro Storage also used small quantities of hazardous materials including Freon 113 and isopropyl alcohol on-site.

DISTRIBUTION OF VOCS -TCE

As stated previously, TCE was detected in ground water sampled from two of Intel's wells in 1982 (IM-1 and IM-2) at an average concentration of 11 and 6 parts per billion (ppb), respectively, with well IM-2 being the up-gradient well. In 1983, TCE was detected in ground water sampled from monitoring well IM-3, which is located approximately 200 to 250 feet down-gradient from the former Intel site. This data indicates that a TCE plume was migrating down-gradient from the 2986 - 3000 Oakmead Village Court site during Intel's and IDT's tenancy. In our opinion, the TCE concentrations present in the soil samples and the lower initial up-gradient TCE levels in the ground water prior to the start up of Intel's ground water pumping indicate a possible TCE source near the waste solvent tank as well as a possible TCE source up-gradient of the former Intel facility.

TCA

TCA was detected in ground water sampled from two of Intel's wells in 1982 (IM-1 and IM-2) at an average concentration of 165 and 220 ppb, respectively, with well IM-2 being the up-gradient well. Intel's down-gradient wells IM-3 and IM-6 were impacted with the TCA plume in 1984 and 1985, respectively. This data indicates that a TCA plume was migrating down-gradient from the project site during Intel's tenancy at 3000 Oakmead Village Court and IDT's and Micro Storage tenancy at the 2986 Oakmead Village Court site. All three corporations did not specifically list TCA as a chemical used on-site.

FREON 113

Freon 113 was initially detected in ground water sampled from Intel wells IM-1, IM-2, and IM-3. The highest reported Freon levels were detected in the down-gradient well IM-3; the lowest reported levels were detected in the up-gradient well IM-2. In 1983, Freon 113 was detected in ground water sampled from IM-1, which was installed near the former solvent waste tank, at an average concentration of 690 ppb, an order of magnitude above Freon levels detected in down- or up-gradient wells and much higher than the previous year's concentration. The much greater Freon 113 concentration in well IM-1 than the up-gradient well IM-2 indicates that the primary source of the Freon 113 plume was the former Intel site during this period.

A second plume was discovered in 1986 at 2986 Oakmead Village Court during Micro Storage tenancy. Subsequently, increasing contamination was detected in the down-gradient wells IM-1, IM-2, and IM-3. Therefore, in our opinion, there appears to have been an original Intel plume prior to 1986 and a late Micro Storage plume impacting the area after 1986.

CONCLUSIONS

The chemical data available indicate that a VOC plume has emanated from the former Intel site and possibly the former IDT site as a result of an on-site spill or leakage incident during the late 70's and/or early 80's. In the mid 1980s, another release occurred near the Micro Storage facility. Today, because contaminants are no longer detectable in the near surface soils and the plumes have comingled near and now beyond the former Intel site, it is difficult to

assess the exact location of each spill as well as the responsible parties. However, the tenants (Intel Magnetics, IDT and Micro Storage) at the 2986 -3000 Oakmead Village Court used hazardous materials on-site and, thus, are likely responsible.

If you have any questions, please call.

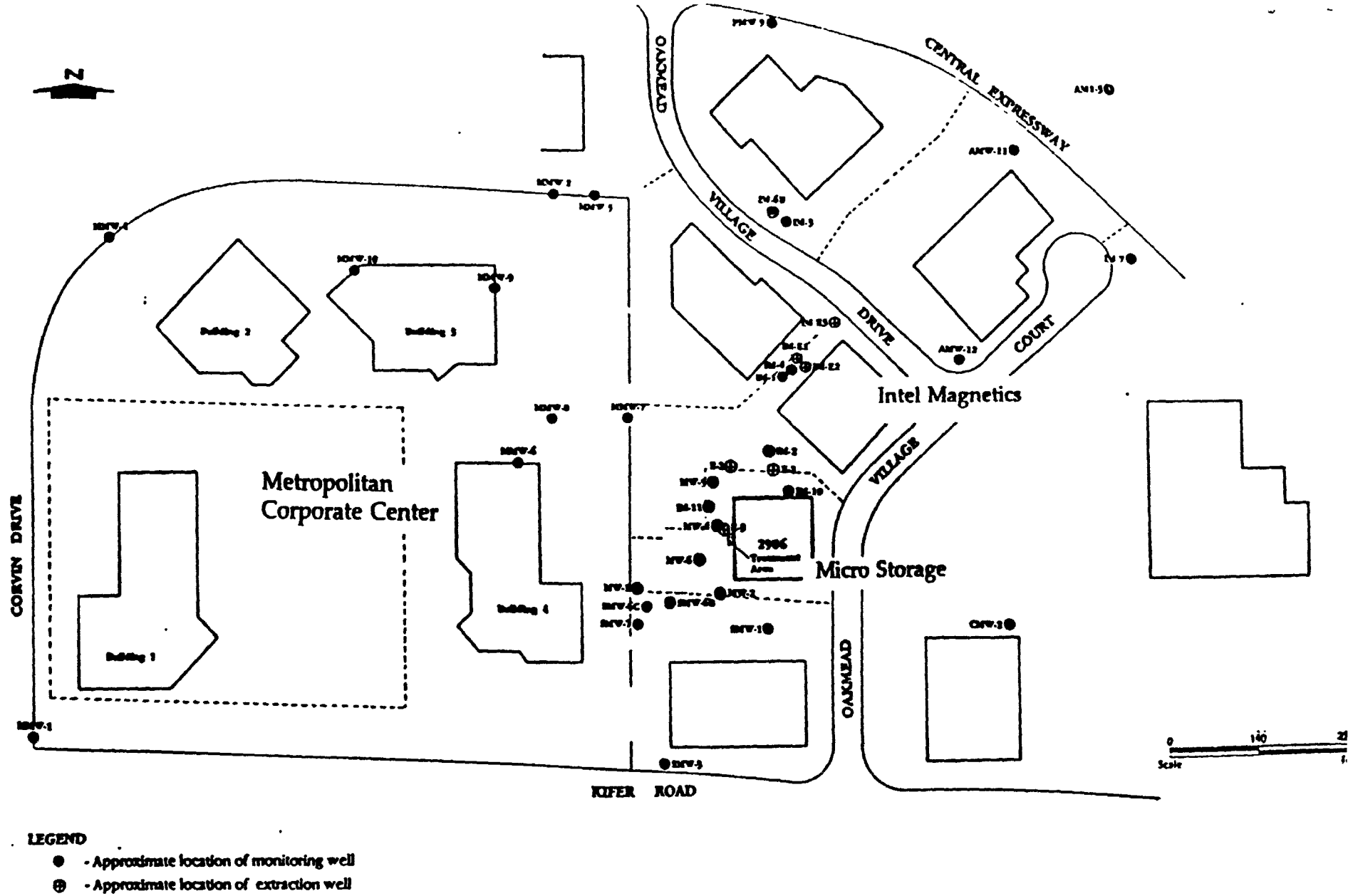
Very truly yours,

LOWNEY ASSOCIATES

Ron L. Helm

John V. Lowney

Copies: Addressee (1)



LEGEND

- ● - Approximate location of monitoring well
- ⊕ - Approximate location of extraction well

Figure 2. Micro Storage/Intel Magnetics Site Map

LEVINE·FRICKE
CONSULTING ENGINEERS AND HYDROGEOLOGISTS

May 16, 1991

LF 1668

Stephen I. Morse
Chief, South Bay Toxics Division
California Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, California 94612

Attention: Mr. Greg Bartow

Subject: Comments on Revisions to Tentative Order for the Micro Storage/Intel Magnetics Combined Federal Superfund Site

Dear Mr. Morse:

On behalf of Metropolitan Life Insurance Company ("Metropolitan"), this letter presents comments on Revisions to the Tentative Order issued on May 1, 1991, by the Regional Water Quality Control Board ("RWQCB") concerning the Micro Storage/Intel Magnetics ("MSC/IM Site"). Metropolitan Life owns the Metropolitan Corporate Center property (the "MCC property"), which is located immediately west of the MSC/IM Site, at 3165 Kifer Road, Santa Clara.

We note that the RWQCB has requested additional lateral definition along the northwestern edge of the MSC/IM plume. Because at least one of the proposed wells will likely be located on the MCC property, Metropolitan has requested us to advise you that it is willing to work with KIM CAMP III (owner of the MSC/IM Site) to arrange for a site access agreement allowing access to Metropolitan's property to install and sample the additional well(s).

As for the location of the additional wells, we agree with the directive in the Tentative Order that the two wells should be located no further than midway between MMW-9 and MMW-7, and MMW-5 and the former location of IM-8, respectively, to obtain additional information needed to better define the lateral extent of the MSC/IM plume.

1900 Powell Street, 12th Floor
Emeryville California 94608
(415) 652-4500
FAX (415) 652-2246

Other offices in Irvine CA Sacramento Roseville CA Tallahassee FL

If you have any questions, please do not hesitate to call either of the undersigned.

Sincerely,

Thomas M. Johnson, R.G.
Principal Hydrogeologist and
Vice President

Amanda Spencer
Sr. Project Hydrogeologist

LAW OFFICES
NOSSAMAN, GUTHNER, KNOX & ELLIOTT

WALTER L. NOSSAMAN
(1886-1964)

LOS ANGELES
THIRTY-FIRST FLOOR
445 SOUTH FIGUEROA STREET
LOS ANGELES, CA 90071-1602
(213) 612-7800

ORANGE COUNTY
SUITE 1250
650 TOWN CENTER DRIVE
COSTA MESA, CA 92626-1981
(714) 835-9000

THIRTY-FOURTH FLOOR
50 CALIFORNIA STREET
SAN FRANCISCO, CALIFORNIA 94111-4712
TELEPHONE (415) 398-3600
FACSIMILE (415) 398-2438

WARREN ELLIOTT
OF COUNSEL

WASHINGTON, D.C.
SUITE 800
1227 25TH STREET, N.W.
WASHINGTON, D.C. 20037-1156
(202) 223-9 00

SACRAMENTO
SUITE 1000
915 L STREET
SACRAMENTO, CA 95814-370
(916) 442-8888

REFER TO FILE NUMBER

VIA FACSIMILE

June 17, 1991 19

Mr. Gregory Bartow
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

RE: Comments of Micro Storage Corporation on the Tentative Order for Site Cleanup Requirements and the Proposed Plan Fact Sheet 2 for the Combined Micro Storage Corporation/ Intel Magnetics Site, Santa Clara

Dear Mr. Bartow:

The following comments on the Regional Water Quality Control Board ("RWQCB") Tentative Order for Site Cleanup Requirements ("Tentative Order") and the Proposed Plan Fact Sheet 2 (the "Proposed Plan") are hereby submitted on behalf of Micro Storage Corporation, a dissolved California corporation, "(MSC"), within the public comment period ending on June 17, 1991:

As you are aware, MSC was dissolved as a corporation in accordance with California law on August 16, 1988. MSC is and has been without adequate resources to participate in or defend itself against actions taken by the RWQCB relating to the referenced site. On behalf of MSC, we continue to object to the designation of the site as the "combined Micro Storage/Intel Magnetics site."

Based upon the history of the site as set forth in the Proposed Plan and the Tentative Order, it appears that the discovery of the VOC contamination at the Intel Magnetics site predates MSC's tenancy at the adjoining site. Furthermore, as acknowledged in the Final Feasibility Study submitted to the

RWQCB by J.V. Lowney & Associates, MSC occupied the site for only a year and six months, while the previous tenant, International Diagnostic Technology, occupied the site for over five years.

The Tentative Order states that "[n]o discrete source of the groundwater pollution has been positively located at MSC." The Tentative Order also reflects that only low levels of VOCs remain under the parking lot near a storage area, and that no further soil action is recommended, inasmuch as the low levels are not likely to impact the groundwater. (Tentative Order, p. 6.) In fact, as set forth in the Proposed Plan, the only chemicals detected in the groundwater at the MSC site at levels above drinking water standards were TCE, 1,1 DCE and 1,2 DCE. There is no evidence that MSC used or stored any of those chemicals. To the contrary, the Tentative Order and the Proposed Plan indicate that the only evidence of chemical usage by MSC was of Freon 113. It is not unreasonable to conclude that the substances which are really at issue in the remedial action plan were either already present in the soil prior to MSC's brief period of occupancy, or were discharged by one of the occupants of an adjoining site whose use of those substances is documented.

Based upon the facts that 1) MSC is a dissolved corporation and is unable to participate in either the administrative process or the implementation of any resulting cleanup requirements; 2) MSC occupied the site for only a brief period, while the previous occupant, not yet named in the Tentative Order, was at the site for a much greater length of time; and 3) there is no evidence that MSC used or stored any of the chemical substances that necessitate the remedial action (i.e., TCE, TCA, 1,1 DCE or 1,2 DCE), we believe it is inappropriate to include MSC in the RWQCB Tentative Order and Proposed Plan and request that the Tentative Order and the Proposed Plan be modified in accordance with the facts presented herein.

Respectfully submitted,

Linda E. Stanley of
NOSSAMAN, GUTHNER, KNOX & ELLIOTT

LNC/106

CDM
environmental engineers scientists planners & management consultants

CAMP DRESSER & McKEE INC.
One Walnut Creek Center
100 Pringle Avenue Suite 300
Walnut Creek California 94596
415 933-2900 Fax No 415 933-4174

April 26, 1991

Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Suite 500
Oakland, CA 94612

ATTN: Mr. Greg Bartow
Mr. Ron Gervason

Subject: Review of Selected Compliance Points for Micro Storage/Intel Magnetics (MSC/IM) Final Remedial Action Plan

Dear Mr. Bartow:

Camp Dresser & McKee Inc. (CDM) has completed a review of your memorandum dated April 19, 1991 to Ron Gervason, detailing your justification for including monitoring wells MMW-2, 5, and 9 as compliance points for the MSC/IM remedial action. In general, your memorandum presents a sound rationale for the decision, and I am in agreement with your general reasoning. By default, the compliance points selected are necessary, since additional wells have not been installed which could help resolve the commingling issue. However, upon review of the data for the two sites, I believe that it is not possible to determine the source of the contamination in MMW-2, 5, and 9 with certainty with the existing information. The following presents the results of my review which may help you in trying to resolve this issue.

1) Water Quality - It is clear that Freon-113 is a source chemical for the MSC/IM plume, and that it is not present in the Metropolitan plume source area. It would appear that the presence of Freon would indicate a MSC/IM source. Freon has not been detected in MMW-5 or MMW-9. Freon has been analyzed for at least three times in MMW-2 with results ranging from non-detected in the current (1990) data to 72 ppb in 1989.

   The shallow water quality reconnaissance data presented by Levine Fricke are also not conclusive in demonstrating that the Metropolitan plume is highly contained. Rather, the data show a steady decrease in concentration away from the source at MMW-10, from over 100 ppb, to 42 ppb, to 73 ppb, to 28 ppb, to 22 ppb in well MMW-9, in a generally easterly direction entirely consistent with the groundwater flow contour map presented in the Levine Fricke Semi-Annual Groundwater Monitoring Results report (March 29, 1991) (Figure 2). Since the shallow reconnaissance samples stop at MMW-9, it is impossible to dismiss a theory that the Metropolitan plume may continue in a flow line from MMW-9 to MMW-2.

2189.8305

2) Groundwater Gradient - I agree entirely with your memorandum regarding flow direction of the plume. The figure presented in the J.V. Lowney report (Figure 25) clearly shows the potential for a northward component of flow which, coupled with plume dispersion and the anisotropic nature of the aquifer(s), could potentially affect MMW-2 and MMW-5.

3) Geologic Analysis - I attempted to expand the existing geologic cross-sections presented in the J.V. Lowney RI report to include the Metropolitan wells to the west, to determine if continuous sands are present between the MSC/IM and Metropolitan sites. My analysis shows that Levine Fricke's conclusion that there is a "buried stream channel" extending from MW-4 to MMW-7, MMW-9, MMW-2 and MMW-5 is not correct (letter to Greg Bartow from Levine Fricke, December 19, 1990). There is a gravelly sand unit observed from about 15 to 21 feet in depth in MW-4 and IM-2 (also in MW-5, although MW-5 is completed deeper), in the general source area at MSC. A finer-grained sand unit is observed in MMW-7, in connection with the gravelly sand. However, MMW-9 is almost predominantly clay, with the exception of 6 inches of sand from 15.5 to 16 feet in depth, and a sandier zone with pebbles from 20 to 24 feet in depth. Similarly, MMW-5 is predominantly clay with fine sandy interbeds, and is only 15 feet in total depth, thus not providing information about deeper A-sands. MMW-2 is also predominantly clay, with no developed "channel sands". The evidence is not compelling for a channel or preferred pathway from the MSC/IM source to MMW-2 and 5. This is consistent with the interpretation presented in the Jacobs Engineering Group report dated September 1988.

A point to note is that the horizontal scale on the J.V. Lowney cross-section location map (Figure 18) is different than the scale on the actual cross-sections, which made it a little difficult to work with the logs.

Recommendations

If MSC/IM feels that the points of compliance are not technically justified, additional subsurface work would be required to adequately determine plume separation. I would recommend at least 2 wells; one on a line between MMW-5 and the former location of IM-8, and one located midway along a line between MMW-9 and MMW-7. Because the reconnaissance sampling performed by Levine Fricke is not reproducible, a third well would also be valuable to define the extent of the Metropolitan plume, and should be located midway between MMW-10 and MMW-2.

Please let me know if you have any questions or concerns.

Very truly yours,

CAMP DRESSER & MCKEE INC.

Sara Black

Sara R. Black
Contract Manager

2041#1.001

PART IV
Agency Addendum

ATTACHMENT A

AGENCY ADDENDUM FOR

REMEDIAL INVESTIGATION/FEASIBILITY STUDY

Combined Micro Storage/Intel Magnetics Site

Kim Camp III submitted a Final Remedial Investigation (RI), dated January 9, 1991 and a Final Feasibility Study dated May 14, 1991.

Regional Board staff have determined that the technical information contained in the RI/FS is acceptable for developing a final cleanup plan; however, Regional Board and other agency staff do not accept all interpretations and recommendations contained in the RI/FS.

Remedial Investigation

Staff disagreed with the portions of the RI addressing the extent of the groundwater pollution along the northwest edge of the plume. Board staff interpret the water quality data differently than is shown in the RI. Board staff recommends that these issues be resolved in this Agency Addendum to the RI and in the RAP, rather than in another revised version of the RI.

The area of disagreement centers on an approximate 2 acre area in the vicinity of wells MMW-2,5,7, and 9 on the Metropolitan Life Insurance Company (Metropolitan) property. The groundwater pollution in this area is primarily TCE at less than 30 parts per billion. KC III believes that the pollution detected in MW-7 is from the MSC/IM site and the pollution detected in MW-2,5,and 9 is from the Metropolitan site. Metropolitan, on the other hand, believes that the pollution in MW-2,5,7,and 9 is all from the combined MSC/IM site.

The extent of the plume remains not fully defined between the former location of monitoring well IM-8 (near MMW-7) and MMW-9. Board staff have repeatedly requested that KCIII conduct additional investigation to address the pollution in this area to better define the northwest margin of the plume. Beginning with our letter to KCIII dated January 30, 1990, and followed by letters dated March 16, 1990, May 17, 1990, and September 20, 1990, we requested that additional investigation be conducted to better define the western margin of the plume. To date, no additional work has been done. In light of KCIII's failure to more fully define the northwestern edge of the MSC/IM plume, the RAP will include tasks that require the dischargers to install additional monitoring wells to fully define the northwest margin of the plume. Wells installed by the dischargers will then be used to set compliance points.

Feasibility Study

Staff has previously requested the removal of the following language regarding compliance: "to the extent technically feasible", "to the extent technically practical," "to the extent technically possible". KCIII has failed to demonstrate that "drinking water quality" cannot be achieved. Table D-1, in fact, provides an adequate assessment of chemical specific ARARs and an estimation of time required to reach cleanup standards. Under Section 121 of CERCLA, ARAR's are statutory requirements that must be met unless the basis for a waiver is

established and the waiver is granted. Such a basis has not been met, thus, language pertaining to "technical impracticability" must be removed from the FS.

The sections of the report listed below are unacceptable in that they provide an incomplete discussion of ARARs and they contain the unacceptable language referenced above. Reference to Table D-1, "Documentation of ARARs" should be made in each of the sections of the report entitled "Compliance with ARARs".

Unacceptable Sections of the Feasibility Study

Section 8.4.1, Page 52, Compliance with ARARs
Section 8.5.1, Page 58, Compliance with ARARs
Section 8.6.1, Page 52, Compliance with ARARs
Section 9.13, Page 70, Long Term Effectiveness
Table 13 (1. Compliance with ARARs and 3. Long Term Effectiveness and Permanence)

Page C-6 of the FS includes a discussion of the uncertainties involved in achieving health based standards. Evaluations of whether or not asymptotic levels have been reached at a site, and decisions involving termination of the extraction system or adjustments cleanup standards are made solely by EPA and the Regional Board.

ADMINISTRATIVE RECORD

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105

ADMINISTRATIVE RECORD
MICRO STORAGE/INTEL MAGNETICS

GUIDANCE DOCUMENTS

The following is a list of U.S. EPA Guidance Documents consulted during development and selection of the Response Action for the Micro Storage Corporation/Intel Magnetics Superfund site in Santa Clara, California. These documents are included in the Compendium of CERCLA Response Selection Guidance Documents (Volumes 1 - 35), which is available for public review at the Superfund Records Center, EPA Region 9, San Francisco.

SELECTED GUIDANCE DOCUMENTS FOR MICRO STORAGE CORPORATION/INTEL MAGNETICS

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** INDEX							
0000		1	INDEX TO COMPENDIUM OF CERCLA RESPONSE SELECTION GUIDANCE DOCUMENTS	05/01/89	- OWPE PRC-ENVIRONMENTAL MANAGEMENT, INC.	8	
** PRE-REMEDIAL							
0001		1	EXPANDED SITE INSPECTION (ESI) TRANSITIONAL GUIDANCE FOR FY-88	10/01/87	- OERR	74	OSWER #9345.1-02
0002		1	PRELIMINARY ASSESSMENT (PA) GUIDANCE FISCAL YEAR 1988	01/01/88	- OERR/HSCD	83	OSWER #9345.0-01
** RI/FS - GENERAL							
2000		2	CASE STUDIES 1-23: REMEDIAL RESPONSE AT HAZARDOUS WASTE SITES	03/01/84	- ORD/OEET/MERL - OSWER/OERR	830	EPA 540/2-84/002B
2001		3	EPA GUIDE FOR MINIMIZING ADVERSE ENVIRONMENTAL EFFECTS OF CLEANUP OF UNCONTROLLED HAZARDOUS-WASTE SITES	06/01/85	- ENVIRONMENTAL RESEARCH LABORATORY	250	EPA/600/8-85/008
2002		3	GUIDANCE FOR CONDUCTING REMEDIAL INVESTIGATIONS AND FEASIBILITY STUDIES UNDER CERCLA	10/01/88	- OSWER/OERR	390	OSWER #9355.3-01

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2005		4	POLICY ON FLOOD PLAINS AND WETLAND ASSESSMENTS FOR CERCLA ACTIONS	08/01/85	- HEDEMAN, JR., W.N./OERR - LUCERO, G./OWPE	9	OSWER #9280.0-02
2006		4	REMEDIAL RESPONSE AT HAZARDOUS WASTE SITES: SUMMARY REPORT	03/01/84	- ORD/MERL	95	EPA 540/2-84/002A
2007		4	REVISED PROCEDURES FOR IMPLEMENTING OFF-SITE RESPONSE ACTIONS	11/13/87	- PORTER, J.W./OSWER	20	OSWER #9834.11
2008		4	RI/FS IMPROVEMENTS	07/23/87	- LONGEST, H.L./OERR	11	OSWER #9355.0-20
2009		4	RI/FS IMPROVEMENTS FOLLOW-UP	04/25/88	- LONGEST, H.L./OERR	16	OSWER #9355.3-05
2011		5	SUPERFUND REMEDIAL DESIGN AND REMEDIAL ACTION GUIDANCE	06/01/86	- OERR	100	OSWER #9355.0-4A
2012		5	SUPERFUND STATE-LEAD REMEDIAL PROJECT MANAGEMENT HANDBOOK	12/01/86	- OERR	120	OSWER #9355.2-1
2013		33	GETTING READY - SCOPING THE RI/FS [QUICK REFERENCE FACT SHEET]	11/01/89	- OERR	6	OSWER #9355.3-01FS1
2015		33	GUIDE FOR CONDUCTING TREATABILITY STUDIES UNDER CERCLA, INTERIM FINAL	12/01/89	- ORD/OERR	118	EPA/540/2-89/058

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2016		33	MODEL STATEMENT OF WORK FOR A REMEDIAL INVESTIGATION AND FEASIBILITY STUDY CONDUCTED BY POTENTIALLY RESPONSIBLE PARTIES	06/02/89	- OWPE	31	OSWER #9835.8
2017		33	RI/FS IMPROVEMENTS PHASE II, STREAMLINING RECOMMENDATIONS	01/01/89	- OERR/OWPE	50	OSWER #9355.3-06
2018		33	THE FEASIBILITY STUDY - DEVELOPMENT AND SCREENING OF REMEDIAL ACTION ALTERNATIVES [QUICK REFERENCE FACT SHEET]	11/01/89	- OSWER	4	OSWER #9355.3-01FS3
2019		33	THE FEASIBILITY STUDY: DETAILED ANALYSIS OF REMEDIAL ACTION ALTERNATIVES [QUICK REFERENCE FACT SHEET]	03/01/90	- OSWER	4	OSWER #9355.3-01FS4
2020		33	TREATABILITY STUDIES UNDER CERCLA: AN OVERVIEW [QUICK REFERENCE FACT SHEET]	12/01/89	- OSWER	6	OSWER #9380.3-02FS
** RI/FS - RI DATA QUALITY/SITE & WASTE ASSESSMENT							
2100		5	A COMPENDIUM OF SUPERFUND FIELD OPERATIONS METHODS	12/01/87	- OERR/ OWPE	550	OSWER #9355.0-14
2101		6	DATA QUALITY OBJECTIVES FOR REMEDIAL RESPONSE ACTIVITIES: DEVELOPMENT PROCESS	03/01/87	- CDM FEDERAL PROGRAMS CORP. - OERR/OWPE	150	OSWER #9355.0-7B

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2102		6	DATA QUALITY OBJECTIVES FOR REMEDIAL RESPONSE ACTIVITIES: EXAMPLE SCENARIO: RI/FS ACTIVITIES AT A SITE W/CONTAMINATED SOILS AND GROUNDWATER	03/01/87	- CDM FEDERAL PROGRAMS CORP. - OERR/OWPE	120	OSWER #9355.0-7B
2103		6	DESIGN AND DEVELOPMENT OF A HAZARDOUS WASTE REACTIVITY TESTING PROTOCOL	02/01/84	- WOLBACH, C.D., ET. AL./ACUREX CORP. - BARKLEY, N./MERL	150	EPA-600/2-84-057
2104		6	FIELD SCREENING FOR ORGANIC CONTAMINANTS IN SAMPLES FROM HAZARDOUS WASTE SITES	04/02/86	- ROFFMAN, H.K., ET. AL./NUS CORP. - CARTER. A/MICHIGAN DEPT. OF NATURAL RESOURCES -THOMAS, T./EPA	11	EPA-600/2-84-057
2105		6	FIELD SCREENING METHODS CATALOG: USER'S GUIDE	09/01/88	- OERR/HSED	90	EPA/540/2-88/005
2106		6	FIELD STANDARD OPERATING PROCEDURES MANUAL #4-SITE ENTRY	01/01/85	- OERR/HRSD	29	OSWER #9285.2-01
2107		7	FIELD STANDARD OPERATING PROCEDURES MANUAL #6-WORK ZONES	04/01/85	- OERR/HRSD	19	OSWER #9285.2-04
2108		7	FIELD STANDARD OPERATING PROCEDURES MANUAL #8-AIR SURVEILLANCE	01/01/85	- OERR/HSCD	24	OSWER #9285.2-03

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2109		7	FIELD STANDARD OPERATING PROCEDURES MANUAL #9-SITE SAFETY PLAN	04/01/85	- OERR/HRSD	26	OSWER #9285.2-05
2110		7	GEOPHYSICAL METHODS FOR LOCATING ABANDONED WELLS	07/01/84	- FRISCHKNECT, L.M., ET. AL./U.S. GEOLOGICAL SURVEY - VANEE, J.J./EMSL	211	EPA-600/4-84-065
2111		7	GEOPHYSICAL TECHNIQUES FOR SENSING BURIED WASTES AND WASTE MIGRATION	06/01/84	- BENSON, R.C., ET. AL./TECNOS, INC. - VANEE, J.J./EMSL	236	EPA-600/7-84/064
2112		8	GUIDELINES AND SPECIFICATIONS FOR PREPARING QUALITY ASSURANCE PROGRAM DOCUMENTATION	06/01/87	- ORD/QUALITY ASSURANCE MANAGEMENT STAFF	31	
2113		8	LABORATORY DATA VALIDATION FUNCTIONAL GUIDELINES FOR EVALUATING INORGANICS ANALYSES (DRAFT)	07/01/88	- BLEYLER, R./VIAR AND CO./SAMPLE MGMT. OFFICE EPA DATA REVIEW WORKGROUP HSED	20	
2114		8	LABORATORY DATA VALIDATION FUNCTIONAL GUIDELINES FOR EVALUATING ORGANIC ANALYSES (DRAFT)	02/01/88	- BLEYLER, R./VIAR AND CO./SAMPLE MGMT. OFFICE EPA DATA REVIEW WORKGROUP HSED	45	

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2115		8	PRACTICAL GUIDE FOR GROUND-WATER SAMPLING	09/01/85	- BARCELONA, M.J., ET. AL./ILLINOIS ST. WATER SURVEY - SCALF, M.R./ORD/ERL	175	EPA/600/2-85/104
2117		8	SOIL SAMPLING QUALITY ASSURANCE USER'S GUIDE	05/01/84	- BARTH D.S. & MASON, B. J./U. OF NEVADA, LAS VEGAS BROWN - K./ORD/EARD	104	EPA 600/4-84/043
2118		9+	TEST METHODS FOR EVALUATING SOLID WASTE, LABORATORY MANUAL PHYSICAL/CHEMICAL METHODS, THIRD EDITION (VOLUMES 1A, 1B, 1C, AND 11)	11/01/86	- OSWER	3000	
2119		11	USER'S GUIDE TO THE CONTRACT LABORATORY PROGRAM	12/01/88	- OERR/CLP SAMPLE MANAGEMENT OFFICE	220	OSWER #9240.0-1
** RI/FS - LAND DISPOSAL FACILITY TECHNOLOGY							
2203		13	GUIDANCE MANUAL FOR MINIMIZING POLLUTION FROM WASTE DISPOSAL SITES	08/01/78	- TOLMAN, A.L., ET.AL./A.W. MARTIN ASSOCIATES, INC. - SANNING, D.E./MERL	83	EPA-600/2-78-142
2204		13	LAND DISPOSAL RESTRICTIONS	08/11/87	- LONGEST, H.L./OERR - LUCERO, G./OWPE	23	

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2213		33	APPLICABILITY OF LAND DISPOSAL RESTRICTIONS TO RCRA AND CERCLA GROUND WATER TREATMENT REINJECTION SUPERFUND MANAGEMENT REVIEW: RECOMMENDATION NO. 26	12/27/89	- CLAY, D.R./OWSER	5	OSWER #9234. 1-06
2214		33	SUPERFUND LDR GUIDE #1 OVERVIEW OF RCRA LAND DISPOSAL RESTRICTIONS (LDRS)	07/01/89	- OERR	4	OSWER #9347.3-01FS
2215		33	SUPERFUND LDR GUIDE #2 COMPLYING WITH THE CALIFORNIA LIST RESTRICTIONS UNDER LAND DISPOSAL RESTRICTIONS (LDRS)	07/01/89	- OERR	2	OSWER #9347.3-02FS
2216		33	SUPERFUND LDR GUIDE #3 TREATMENT STANDARDS AND MINIMUM TECHNOLOGY REQUIREMENTS UNDER LAND DISPOSAL RESTRICTIONS (LDRS)	07/01/89	- OERR	4	OSWER #9347.3-03FS
2217		33	SUPERFUND LDR GUIDE #4 COMPLYING WITH THE HAMMER RESTRICTIONS UNDER LAND DISPOSAL RESTRICTIONS (LDRS)	07/01/89	- OERR	4	OSWER #9347.3-04FS
2218		33	SUPERFUND LDR GUIDE #5 DETERMINING WHEN LAND DISPOSAL RESTRICTIONS (LDRS) ARE APPLICABLE TO CERCLA RESPONSE ACTIONS	07/01/89	- OERR	4	OSWER #9347.3-05FS
2219		33	SUPERFUND LDR GUIDE #6A OBTAINING A SOIL AND DEBRIS TREATABILITY VARIANCE FOR REMEDIAL ACTIONS	07/01/89	- OERR	6	OSWER #9347.3-06FS

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2220		33	SUPERFUND LDR GUIDE #7 DETERMINING WHEN LAND DISPOSAL RESTRICTIONS (LDRS) ARE RELEVANT AND APPROPRIATE TO CERCLA RESPONSE ACTIONS	12/01/89	- OERR	2	OSWER #9347.3-08FS
** RI/FS - OTHER TECHNOLOGIES							
2303		17	EPA GUIDE FOR IDENTIFYING CLEANUP ALTERNATIVES AT HAZARDOUS WASTE SITES AND SPILLS: BIOLOGICAL TREATMENT	/ /	- PACIFIC NORTHWEST LABORATORY - RANIERE, L.C./CORVALLIS ENVIRONMENTAL RESEARCH LAB	120	EPA-600/3-83-063
2319		22	TECHNOLOGY SCREENING GUIDE FOR TREATMENT OF CERCLA SOILS AND SLUDGES	09/01/88	- OSWER/OERR	130	EPA/540/2-88/004
2326		33	INNOVATIVE TECHNOLOGY - SLURRY-PHASE BIODEGRADATION [QUICK REFERENCE FACT SHEET]	11/01/89	- OSWER	2	OSWER #9200.5-25FS
** RI/FS - GROUND-WATER MONITORING & PROTECTION							
2403		24	GROUND-WATER PROTECTION STRATEGY	08/01/84	- OFFICE OF GROUND-WATER PROTECTION	65	EPA/440/6-84-002
2404		24	GUIDELINES FOR GROUND-WATER CLASSIFICATION UNDER THE EPA (DRAFT)	12/01/86	- OFFICE OF GROUND-WATER PROTECTION	600	

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2410		34	CONSIDERATIONS IN GROUND WATER REMEDIATION AT SUPERFUND SITES	10/18/89	- OSWER	8	OSWER #9355.4-03
** ARARS							
3001		25	CERCLA COMPLIANCE AND OTHER ENVIRONMENTAL STATUTES	10/02/85	- PORTER, J.W./OSWER	19	OSWER #9234.0-2
3002		25	CERCLA COMPLIANCE WITH OTHER LAWS MANUAL (DRAFT)	08/08/88	- OERR	245	OSWER #9234.1-01
3003		25	EPA'S IMPLEMENTATION OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986	05/21/87	- THOMAS, L.M./EPA	4	
3007		34	ARARS SHROT GUIDANCE QUARTERLY REPORT [QUICK REFERENCE FACT SHEET]	12/01/89	- OSWER	5	OSWER #9234.3-001
3008		34	ARARS SHORT GUIDANCE QUARTERLTY REPORT [QUICK REFERENCE FACT SHEET]	03/01/90	- OERR/OPM	1	OSWER #9234.3-001
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3011		34	CERCLA COMPLIANCE WITH OTHER LAWS MANUAL - OVERVIEW OF ARARS - FOCUS ON ARAR WAIVERS [QUICK REFERENCE FACT SHEET]	12/01/89	- OSWER	5	OSWER #9234.2-03FS
3012		34	CERCLA COMPLIANCE WITH OTHER LAWS MANUAL - SUMMARY OF PART II - CAA, TSCA, AND OTHER STATUES [QUICK REFERENCE FACT SHEET]	04/01/90	- OERR/OPM	8	OSWER #9234.2-07FS
3013		34	CERCLA COMPLIANCE WITH OTHER LAWS MANUAL PART II: CLEAN AIR ACT AND OTHER ENVIRONMENTAL STATUES AND STATE REQUIREMENTS	08/01/89	- OERR	175	OSWER #9234.1-02
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4002		26	INTERIM FINAL GUIDANCE ON REMOVAL ACTION LEVELS AT CONTAMINATED DRINKING WATER SITES	10/06/87	- OSWER/OERR	9	OSWER #9360.1-01
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5000		27	ATSDR HEALTH ASSESSMENTS ON NPL SITES (DRAFT)	06/16/86	- DEPT. OF HEALTH AND HUMAN SERVICES/ATSDR	14	
5001		27	CHEMICAL, PHYSICAL & BIOLOGICAL PROPERTIES OF COMPOUNDS PRESENT AT HAZARDOUS WASTE SITES	09/27/85	- CLEMENT ASSOCIATES, INC.	320	OSWER #9850.3
5002		27	FINAL GUIDANCE FOR THE COORDINATION OF ATSDR HEALTH ASSESSMENT ACTIVITIES WITH THE SUPERFUND REMEDIAL PROCESS	05/14/87	- PORTER, J.W./OSWER/OERR - ATSDR	22	OSWER #9285.4-02
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5015		31	TOXICOLOGY HANDBOOK	08/01/85	- LIFE SYSTEMS, INC. - TYBURSKI, T.E./OWPE	126	OSWER #9850.2

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5023		37	RISK ASSESSMENT GUIDANCE FOR SUPERFUND, VOLUME 1, HUMAN HEALTH EVALUATION MANUAL	09/29/89	- OERR	290	OSWER #9285.7-01A
5040		39	TOXICOLOGICAL PROFILE FOR TRICHLOROETHYLENE	10/01/89	- ATSDR	139	
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7000		32	COMMUNITY RELATIONS IN SUPERFUND: A HANDBOOK (INTERIM VERSION)	06/01/88	- OERR	188	OSWER #9230.0-03B

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8000		32	ENDANGERMENT ASSESSMENT GUIDANCE	11/22/85	- PORTER, J.W./OSWER	11	OSWER #9850.0-1
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9000		32	INTERIM GUIDANCE ON SUPERFUND SELECTION OF REMEDY	12/24/86	- PORTER, J.W./OSWER	10	OSWER #9355.0-19
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9002		39	A GUIDE TO SELECTING SUPERFUND REMEDIAL ACTIONS	04/01/90	- OERR/HSCD	6	OSWER #9355.0-27FS
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	9005	40	GROUND WATER ISSUE: PERFORMANCE EVALUATIONS OF PUMP-AND-TREAT REMEDIATIONS	/ /	- KEELEY, J.F.	19	EPA/540/4-89/005
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	9020	41	RISK ASSESSMENT GUIDANCE FOR SUPERFUND HUMAN HEALTH RISK ASSESSMENT: U.S. EPA REGION IX RECOMMENDATIONS	12/15/89		19	
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	9051	43	BASICS OF PUMP-AND-TREAT GROUND-WATER REMEDIATION TECHNOLOGY	03/00/90	- J. W. MERCER ET AL/GEOTRANS, INC./ENVIRONMENTAL RESEARCH LABORATORY	63	
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	9056	44	DETERMINING WHEN LAND DISPOSAL RESTRICTIONS (LDRS) ARE APPLICABLE TO CERCLA RESPONSE ACTIONS	07/00/89	- OERR	4	9347.3-05FS
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	9058	44	INTERIM FINAL GUIDANCE ON PREPARING SUPERFUND DECISION DOCUMENTS	06/01/89		202	OSWER #9355.3-02

TECHNICAL REPORTS

Administrative Record - 2986 Oakmead Village Court

Document Date:	11/30/83	Date Received:	00/00/00
Author:	Earth Sciences Associates		
Recipient:	Intel Corporation		
Subject:	3000 Oakmead Village Court		
Contents:	Phase III Ground Water Investigation		
Document Type:	Technical Report	No. of Pages:	18

Document Date:	6/27/84	Date Received:	00/00/00
Author:	Daniel Sokol, Ph.D.		
Recipient:	Intel		
Subject:	3000 Oakmead Village Court		
Contents:	Proposed Remedial Contamination Action Program		
Document Type:	Technical Report	No. of Pages:	20

Document Date:	4/23/85	Date Received:	00/00/00
Author:	Weiss Associates		
Recipient:	Intel Corporation		
Subject:	3000 Oakmead Village Court		
Contents:	Progress Report, Ground Water Remedial Action		
Document Type:	Technical Report	No. of Pages:	38

Document Date:	10/15/85	Date Received:	00/00/00
Author:	Wahler Associates		
Recipient:	Intel Corporation		
Subject:	3000 Oakmead Village Court		
Contents:	Environmental Monitoring Report - Intel Tank Replacement		
Document Type:	Technical Report	No. of Pages:	6

Document Date:	12/22/86	Date Received:	00/00/00
Author:	Weiss Associates		
Recipient:	Intel Corporation		
Subject:	3000 Oakmead Village Court		
Contents:	Final Water Quality Objective		
Document Type:	Technical Report	No. of Pages:	71

Administrative Record - 2986 Oakmead Village Court

Document Date: 5/15/87 Date Received: 00/00/00
Author: Anametrix
Recipient: EMCON Associates
Subject: 2986 Oakmead Village Court
Contents: Analytical Results

Document Type: Technical Report No. of Pages: 4

Document Date: 5/22/87 Date Received: 00/00/00
Author: International Technology Corporation
Recipient: EMCON Associates
Subject: 2986 Oakmead Village Court
Contents: Analytical Results

Document Type: Technical Report No. of Pages: 3

Document Date: 6/1/87 Date Received: 00/00/00
Author: Emcon Associates
Recipient: KIM CAMP III
Subject: 2986 Oakmead Villlage Court
Contents: Hydrogeologic Report

Document Type: Technical Report No. of Pages: 29

Document Date: 11/19/87 Date Received: 00/00/00
Author: Geonomics, Inc.
Recipient: J.V. Lowney & Associates
Subject: 2986 Oakmead Village Court
Contents: Addendum to Soil Vapor Survey Report

Document Type: Technical Report No. of Pages: 1

Document Date: 12/15/87 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III - Peter Fraser
Subject: 2986 Oakmead Village Court
Contents: Ground Water Quality Reconnaissance Investigation
Document Type: Technical Report No. of Pages: 22

Administrative Record - 2986 Oakmead Village Court

Document Date:	3/30/88	Date Received:	00/00/00
Author:	Weiss Associates		
Recipient:	Intel Corporation		
Subject:	3000 Oakmead Village Court		
Contents:	Quality Assurance/Quality Control Plan/ Sampling Plan and Site Health & Safety Plan		
Document Type:	Technical Report	No. of Pages:	73

Document Date:	6/1/88	Date Received:	00/00/00
Author:	Tracer Research Corp.		
Recipient:	J.V. Lowney & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	Shallow Soil Gas Investigation		
Document Type:	Technical Report	No. of Pages:	16

Document Date:	8/3/88	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Soil Gas Survey and Soil Quality Analysis		
Document Type:	Technical Report	No. of Pages:	8

Document Date:	9/27/88	Date Received:	00/00/00
Author:	EPA		
Recipient:	CRWQCB - Jeff Willett		
Subject:	2986 Oakmead Village Court		
Contents:	Review of Contaminant Plum for Intel Magnetics Site		
Document Type:	Technical Report	No. of Pages:	2

Document Date:	9/30/88	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Work Plan for Remedial Investigation/Feasibility Study		
Document Type:	Technical Report	No. of Pages:	29

Administrative Record - 2986 Oakmead Village Court

Document Date:	9/30/88	Date Received:	00/00/00
Author:	Jacobs Engineering/Metcalf & Eddy		
Recipient:	EPA		
Subject:	3000 Oakmead Village Court		
Contents:	Contamination Plume Evaluation		
Document Type:	Technical Report	No. of Pages:	35

Document Date:	12/1/88	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Progress Report for Remedial Investigation/Feasibility Study		
Document Type:	Technical Report	No. of Pages:	3

Document Date:	2/6/89	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Revised Work Plan for Remedial Investigation/Feasibility Study		
Document Type:	Technical Report	No. of Pages:	1

Document Date:	3/29/89	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Quality Assurance Project Plan/Sampling Plan and Health and Safety Plan		
Document Type:	Technical Report	No. of Pages:	58

Document Date:	4/1/89	Date Received:	4/18/89
Author:	Chips Environmental Consultants		
Recipient:	J.V. Lowney & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	Field Sampling Analysis of Soil Gases		
Document Type:	Technical Report	No. of Pages:	1

Administrative Record - 2986 Oakmead Village Court

Document Date: 4/4/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB - Steve Morse
Subject: 2986 Oakmead Village Court
Contents: Addendum to Revised Work Plan

Document Type: Technical Report No. of Pages: 1

Document Date: 6/5/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III/Intel/ODH/Community Assoc.
Subject: 2986 Oakmead Village Court
Contents: 2nd Quarter Ground Water Elevations Report

Document Type: Technical Report No. of Pages: 6

Document Date: 8/31/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/EPA/SCVWD/KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: Vertical Conduit Study

Document Type: Technical Report No. of Pages: 7

Document Date: 9/15/89 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III/Intel
Subject: 2986/3000 Oakmead Village Court
Contents: Community Relations Plan

Document Type: Technical Report No. of Pages: 17

Document Date: 10/19/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III/ODH/Intel/Community Assoc.
Subject: 2986 Oakmead Village Court
Contents: 3rd Quarter Ground Water Level Measurements

Document Type: Technical Report No. of Pages: 3

Administrative Record - 2986 Oakmead Village Court

Document Date: 10/24/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/EPA/SCVWD/KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: 3rd Quarter Sampling Report

Document Type: Technical Report No. of Pages: 12

Document Date: 1/17/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III/ODH/Intel/Community Assoc.
Subject: 2986 Oakmead Village Court
Contents: Quarterly Ground Water Elevations Report

Document Type: Technical Report No. of Pages: 3

Document Date: 1/30/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/EPA/SCVWD/KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: 4th Quarter Sampling Report

Document Type: Technical Report No. of Pages: 13

Document Date: 4/12/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III/ODH/Intel/Community Assoc.
Subject: 2986 Oakmead Village Court
Contents: Quarterly Ground Water Elevations Report

Document Type: Technical Report No. of Pages: 4

Document Date: 4/23/90 Date Received: 00/00/00
Author: Intel
Recipient: CRWQCB - Greg Bartow
Subject: 3000 Oakmead Village Court
Contents: Destruction of Wells (4) at Micro Storage/
Intel Magnetics Site
Document Type: Technical Report No. of Pages: 1

Administrative Record - 2986 Oakmead Village Court

Document Date: 4/25/90 Date Received: 00/00/00
Author: Weiss Associates
Recipient: Intel Corporation
Subject: 3000 Oakmead Village Court
Contents: Monitoring Well Destruction

Document Type: Technical Report No. of Pages: 3

Document Date: 5/1/90 Date Received: 00/00/00
Author: Clement Associates
Recipient: CRWQCB - John Wolfenden
Subject: 2986 Oakmead Village Court
Contents: Final BPHE

Document Type: Technical Report No. of Pages: 1

Document Date: 5/18/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/EPA/SCVWD/KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: 1st Quarter Sampling Report

Document Type: Technical Report No. of Pages: 13

Document Date: 7/27/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/EPA/SCVWD/KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: 2nd Quarter Sampling Report

Document Type: Technical Report No. of Pages: 16

Document Date: 8/9/90 Date Received: 00/00/00
Author: EPA
Recipient: CRWQCB
Subject: 2986 Oakmead Village Court
Contents: Draft Feasibility Study Approval

Document Type: Technical Report No. of Pages: 1

Administrative Record - 2986 Oakmead Village Court

Document Date: 10/31/90 Date Received: 00/00/00
Author: Landels, Ripley & Diamond
Recipient: CRWQCB - Greg Bartow
Subject: 3165 Kifer Road
Contents: Ground Water Elevations

Document Type: Technical Report No. of Pages: 1

Document Date: 11/7/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/EPA/SCVWD/KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: 3rd Quarter Sampling Report

Document Type: Technical Report No. of Pages: 14

Document Date: 11/29/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: City of Mountain View
Subject: 2986 Oakmead Village Court
Contents: Disposal of Soil Cuttings

Document Type: Technical Report No. of Pages: 2

Document Date: 1/9/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/EPA/SCVWD/KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: Final Remedial Investigation

Document Type: Technical Report No. of Pages: 44

Document Date: 1/9/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/EPA/SCVWD/KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: Feasibility Study

Document Type: Technical Report No. of Pages: 73

Administrative Record - 2986 Oakmead Village Court

Document Date: 1/18/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/EPA/SCVWD/KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: 4th Quarter Sampling Report

Document Type: Technical Report No. of Pages: 14

Document Date: 2/15/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB
Subject: January 1991 NPDES Monitoring Report
Contents: Results of Effluent Monitoring

Document Type: Technical Report No. of Pages: 27

Document Date: 3/14/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB
Subject: February 1991 NPDES Monitoring Report
Contents: Results of Effluent Monitoring

Document Type: Technical Report No. of Pages: 36

Document Date: 4/16/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB
Subject: March 1991 NPDES Monitoring Report
Contents: Results of Effluent Monitoring

Document Type: Technical Report No. of Pages: 31

Document Date: 5/8/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB
Subject: April NPDES Monitoring Report
Contents: Results of NPDES Monitoring

Document Type: Technical Report No. of Pages: 28

Administrative Record - 2986 Oakmead Village Court

Document Date:	5/14/91	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	Kim Camp III		
Subject:	Feasibility Study		
Contents:	Feasibility Study for 2986 Oakmead Village Court.		
Document Type:	Technical Report	No. of Pages:	104

Document Date:	6/4/91	Date Received:	00/00/00
Author:	Lowney Associates		
Recipient:	Kim Camp III		
Subject:	2986 Oakmead Village Court		
Contents:	1st Quarter 1991 Monitoring Report		
Document Type:	Technical Report	No. of Pages:	94

Document Date:	6/12/91	Date Received:	00/00/00
Author:	Weiss Associates		
Recipient:	Intel Corporation		
Subject:	Assessment of the Responsibility		
Contents:	Assessment of the Responsibility of Intel for Future Monitoring and Cleanup.		
Document Type:	Technical Report	No. of Pages:	25

Document Date:	7/1/91	Date Received:	00/00/00
Author:	Lowney Associates		
Recipient:	CRWQCB		
Subject:	May 1991 NPDES Monitoring Report		
Contents:	Results of NPDES Monitoring		
Document Type:	Technical Report	No. of Pages:	27

TENTATIVE ORDERS/PROPOSALS

Administrative Record - 2986 Oakmead Village Court

Document Date:	4/20/87	Date Received:	4/25/87
Author:	CRWQCB - Stephen Morse		
Recipient:	KIM CAMP III - Peter Fraser		
Subject:	2986 Oakmead Village Court		
Contents:	Approval for Proposed Ground Water Investigation		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Document Date:	8/17/87	Date Received:	00/00/00
Author:	CRWQCB - Stephen Morse		
Recipient:	KIM CAMP III - Peter Fraser		
Subject:	2986 Oakmead Village Court		
Contents:	Approval of Ground Water Investigation		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Document Date:	4/21/88	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Request for Technical Report		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Document Date:	5/20/88	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	CRWQCB - Stephen Morse		
Subject:	2986 Oakmead Village Court		
Contents:	Definition of the Contamination Source		
Document Type:	Proposal/Tentative Order	No. of Pages:	2

Document Date:	6/17/88	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	Toxics and Waste Management Division		
Subject:	2986 Oakmead Village Court		
Contents:	Site Name and Plume Definition		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Administrative Record - 2986 Oakmead Village Court

Document Date:	7/8/88	Date Received:	7/20/88
Author:	CRWQCB		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Request for Submittal of a Proposed Work Plan		
Document Type:	Proposal/Tentative Order	No. of Pages:	3

Document Date:	8/4/88	Date Received:	8/9/88
Author:	CRWQCB - Jeff Willett		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Draft Tentative Order for Site Clean-Up Requirements		
Document Type:	Proposal/Tentative Order	No. of Pages:	9

Document Date:	8/16/88	Date Received:	8/17/88
Author:	CRWQCB - Stephen Morse		
Recipient:	KIM CAMP III/Micro Storage/Intel		
Subject:	2986 Oakmead Village Court		
Contents:	Notice of Tentative Order for Site Clean-Up Requirements		
Document Type:	Proposal/Tentative Order	No. of Pages:	8

Document Date:	9/13/88	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Changes in Tentative Order		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Document Date:	12/20/88	Date Received:	12/21/88
Author:	CRWQCB - Stephen Morse		
Recipient:	KIM CAMP III/Micro Storage/Intel		
Subject:	2986 Oakmead Village Court		
Contents:	Notice of Tentative Order Site Clean-Up Requirements		
Document Type:	Proposal/Tentative Order	No. of Pages:	9

Administrative Record - 2986 Oakmead Village Court

Document Date:	1/25/89	Date Received:	1/26/89
Author:	CRWQCB - Steven Ritchie		
Recipient:	KIM CAMP III/Micro Storage/Intel		
Subject:	2986 Oakmead Village Court		
Contents:	Certified Copy of a CRWQCB - Adopted 1/25/89		
Document Type:	Proposal/Tentative Order	No. of Pages:	2

Document Date:	2/7/89	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III/ODH/Intel/ Community Assoc.		
Subject:	2986 Oakmead Village Court		
Contents:	Request for Monitoring Wells Data		
Document Type:	Proposal/Tentative Order	No. of Pages:	2

Document Date:	2/22/89	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	CRWQCB - Stephen Morse		
Subject:	2986 Oakmead Village Court		
Contents:	Resurveying of Monitoring Wells		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Document Date:	3/24/89	Date Received:	00/00/00
Author:	CRWQCB - Steven Ritchie		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Notice to KIM CAMP III of Failure to Comply		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Document Date:	3/24/89	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	CRWQCB and EPA comments on the revised Remedial Action Plan		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Administrative Record - 2986 Oakmead Village Court

Document Date:	4/14/89	Date Received:	00/00/00
Author:	CRWQCB - Steve Morse		
Recipient:	KIM CAMP III/Micro Storage/Intel		
Subject:	2986 Oakmead Village Court		
Contents:	Notice of Tentative Order Site Clean-Up Requirements		
Document Type:	Proposal/Tentative Order	No. of Pages:	10

Document Date:	6/2/89	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	BPHE Baseline Package Request		
Document Type:	Proposal/Tentative Order	No. of Pages:	2

Document Date:	6/8/89	Date Received:	6/12/89
Author:	CRWQCB - Stephen Morse		
Recipient:	KIM CAMP III/Micro Storage/Intel		
Subject:	2986 Oakmead Village Court		
Contents:	Certified copy of Board's 5/17/89 Order		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Document Date:	6/12/89	Date Received:	6/13/89
Author:	KIM CAMP III - Stephen Belomy		
Recipient:	J.V. Lowney & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	Copy of New Water Board Order for KIM CAMP III		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Document Date:	7/10/89	Date Received:	7/11/89
Author:	KIM CAMP III - Stephen Belomy		
Recipient:	CRWQCB - Greg Bartow		
Subject:	2986 Oakmead Village Court		
Contents:	Board Order #89-068		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Administrative Record - 2986 Oakmead Village Court

Document Date: 8/8/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III/CRWQCB
Subject: 2986 Oakmead Village Court
Contents: Proposal for Administrative Record

Document Type: Proposal/Tentative Order No. of Pages: 2

Document Date: 8/28/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Proposal for Interim Remedial Actions

Document Type: Proposal/Tentative Order No. of Pages: 11

Document Date: 10/2/89 Date Received: 00/00/00
Author: CRWQCB
Recipient: J.V. Lowney & Associates
Subject: 2986 Oakmead Village Court
Contents: QAPP Approval

Document Type: Proposal/Tentative Order No. of Pages: 1

Document Date: 10/31/89 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III/Intel
Subject: 2986 and 3000 Oakmead Village Court
Contents: Public Health Evaluation Data Gaps

Document Type: Proposal/Tentative Order No. of Pages: 1

Document Date: 10/31/89 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Interim Remedial Actions Proposal

Document Type: Proposal/Tentative Order No. of Pages: 2

Administrative Record - 2986 Oakmead Village Court

Document Date: 11/21/89 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: Request for Technical Report Documenting Interim Remedial Actions
Document Type: Proposal/Tentative Order No. of Pages: 1

Document Date: 12/5/89 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III/Intel
Subject: 2986 and 3000 Oakmead Village Court
Contents: Vertical Conduit Study Coments
Document Type: Proposal/Tentative Order No. of Pages: 2

Document Date: 2/7/90 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: Tentative Waste Discharge Requirements
Document Type: Proposal/Tentative Order No. of Pages: 1

Document Date: 3/16/90 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Additional Tasks - Remedial Investigation/Interim Remedial Measures
Document Type: Proposal/Tentative Order No. of Pages: 3

Document Date: 3/16/90 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III/Intel
Subject: 2986 and 3000 Oakmead Village Court
Contents: Destruction of Potential Vertical Conduits
Document Type: Proposal/Tentative Order No. of Pages: 2

Administrative Record - 2986 Oakmead Village Court

Document Date: 3/21/90 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Self Monitoring Program, Adopted 3/21/90

Document Type: Proposal/Tentative Order No. of Pages: 7

Document Date: 1/9/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Proposed Plan

Document Type: Proposal/Tentative Order No. of Pages: 6

Document Date: 2/14/91 Date Received: 00/00/00
Author: CRWQCB - Stephen I. Morse
Recipient: Kim Camp III
Subject: Administrative Record
Contents: Request for Update of Administrative Record

Document Type: Proposal/Tentative Order No. of Pages: 2

Document Date: 2/15/91 Date Received: 2/19/91
Author: CRWQCB - Stephen I. Morse
Recipient: Intel Corporation
Subject: Administrative Record
Contents: Request for Update of Administrative Record

Document Type: Proposal/Tentative Order No. of Pages: 2

Document Date: 3/28/91 Date Received: 00/00/00
Author: CRWQCB - Steven R. Ritchie
Recipient: Kim Camp III/Intel/et. al.
Subject: Proposed R.A.P. & Site Cleanup Requirements
Contents: Tentative Order

Document Type: Proposal/Tentative Order No. of Pages: 47

Administrative Record - 2986 Oakmead Village Court

Document Date:	4/4/91	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	Kim Camp III/Intel/ et. al.		
Subject:	Combined Micro Storage Corp./Intel Magnetics S		
Contents:	Additions to Tentative Order		
Document Type:	Proposal/Tentative Order	No. of Pages:	4

Document Date:	4/12/91	Date Received:	00/00/00
Author:	CRWQCB - Stephen I. Morse		
Recipient:	Intel Corporation		
Subject:	Notice of Tentative Order		
Contents:	NPDES Permit for Intel		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Document Date:	4/16/91	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	Campeau Corp./Kim Camp III/Westal Corp.		
Subject:	2986 Oakmead Village Court		
Contents:	Modifications to Tentative Order to Include Four Additional Potentially Responsible Parties.		
Document Type:	Proposal/Tentative Order	No. of Pages:	3

Document Date:	5/1/91	Date Received:	00/00/00
Author:	CRWQCB - Stephen I. Morse		
Recipient:	Kim Camp III/Intel/et. al.		
Subject:	Notice of intent to revise tentative order		
Contents:	Additional tasks to be included in tentative order		
Document Type:	Proposal/Tentative Order	No. of Pages:	3

Document Date:	6/6/91	Date Received:	00/00/00
Author:	EPA - Rose Marie Caraway		
Recipient:	CRWQCB - Greg Bartow		
Subject:	2986 Oakmead Village Court		
Contents:	Comments on Proposed Final Remedial Action Plan		
Document Type:	Proposal/Tentative Order	No. of Pages:	4

Administrative Record - 2986 Oakmead Village Court

Document Date: 7/3/91 Date Received: 00/00/00
Author: CRWQCB
Recipient: Kim Camp III/Intel/et. al.
Subject: Revised Tentative Order Proposed Final Remedial
Contents: Tentative Order

Document Type: Proposal/Tentative Order No. of Pages: 66

Document Date: 7/14/91 Date Received: 00/00/00
Author: CRWQCB
Recipient: KC III/Micro Storage/Intel/EPA/Lowney
Subject: Tentative Order
Contents: Revisions to Tentative Order

Document Type: Proposal/Tentative Order No. of Pages: 3

Document Date: 7/26/91 Date Received: 00/00/00
Author: Lowney Associates
Recipient: Kim Camp III/CRWQCB
Subject: 2986 Oakmead Village Court
Contents: Proposal for Northwest Plume Definition

Document Type: Proposal/Tentative Order No. of Pages: 4

Document Date: 7/29/91 Date Received: 00/00/00
Author: CRWQCB
Recipient: Kimp Camp III/Intel/et. al.
Subject: Order - Site Cleanup Requirements
Contents: Order No. 91-119

Document Type: Proposal/Tentative Order No. of Pages: 66

GENERAL CORRESPONDENCE/MISCELLANEOUS

Administrative Record - 2986 Oakmead Village Court

Document Date:	10/28/86	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III - Peter Fraser		
Subject:	2986 Oakmead Village Court		
Contents:	Request of Information - Past Chemical Handling/Usage		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Document Date:	7/18/87	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III - Peter M. Fraser		
Subject:	2986 Oakmead Village Court		
Contents:	Clarification of Solvent Origin		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	7/18/87	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	Boehringer Ingelheim Pharmaceuticals		
Subject:	2986 Oakmead Village Court		
Contents:	Request for Chemical Usage Information		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Document Date:	8/17/87	Date Received:	8/18/87
Author:	Taylor & Stanley		
Recipient:	CRWQCB - Stephen Morse		
Subject:	2986 Oakmead Village Court		
Contents:	Request for Chemical Usage Information		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Document Date:	10/9/87	Date Received:	00/00/00
Author:	Geonomics, Inc.		
Recipient:	J.V. Lowney & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	Contour Map and Report		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Administrative Record - 2986 Oakmead Village Court

Document Date: 8/8/88 Date Received: 8/9/88
Author: KIM CAMP III - Stephen Belomy
Recipient: J.V. Lowney & Associates
Subject: 2986 Oakmead Village Court
Contents: Enclosure of copy of Jeff Willett's Letter (8/4/88)

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 9/8/88 Date Received: 9/11/88
Author: CRWQCB - Stephen Morse
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Confirmation of Decisions Regarding Remedial Investigation
Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 10/12/88 Date Received: 00/00/00
Author: EPA
Recipient: CRWQCB
Subject: 2986 Oakmead Village Court
Contents: Primary Source of Contamination

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 11/7/88 Date Received: 11/10/88
Author: KIM CAMP III - Stephen Belomy
Recipient: J.V. Lowney & Associates
Subject: 2986 Oakmead Village Court
Contents: Report prepard for the EPA regarding Intel Site

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 12/28/88 Date Received: 1/3/89
Author: CRWQCB
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: CRWQCB and EPA Comments on Remedial Investigation/Feasibility Study
Document Type: General Correspondence/Misc. No. of Pages: 6

Administrative Record - 2986 Oakmead Village Court

Document Date: 12/30/88 Date Received: 1/3/89
Author: CRWQCB
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: CRWQCB and EPA comments on Quality Assurance Project Plan
Document Type: General Correspondence/Misc. No. of Pages: 4

Document Date: 1/3/89 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Review of Draft Community Relations Plan
Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 1/13/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Comments on Draft Community Relations Plan
Document Type: General Correspondence/Misc. No. of Pages: 3

Document Date: 2/15/89 Date Received: 00/00/00
Author: KIM CAMP III - Stephen Belomy
Recipient: J.V. Lowney & Associates
Subject: 2986 Oakmead Village Court
Contents: Request for Response to (CRWQCB) Greg Bartow's Letter
Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 3/17/89 Date Received: 3/21/89
Author: CRWQCB
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: CRWQCB and EPA comments on the revised QAPP and Heath and Safety Plan
Document Type: General Correspondence/Misc. No. of Pages: 4

Administrative Record - 2986 Oakmead Village Court

Document Date: 3/31/89 Date Received: 00/00/00
Author: CRWQCB
Recipient: Santa Clara County Cercla Sites
Subject: Superfund Baseline Public Health Evaluations
Contents: BPHE Workshop

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 4/4/89 Date Received: 00/00/00
Author: KIM CAMP III - Stephen Belomy
Recipient: Department of Health Services
Subject: 2986 Oakmead Village Court
Contents: California I.D. Number Application

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 4/13/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: SCVWD, Wells Department
Subject: 2986 Oakmead Village Court
Contents: Monitoring Well Permit Application (2)

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 4/14/89 Date Received: 4/17/89
Author: KIM CAMP III - Stephen Belomy
Recipient: CDHS - Cindy Bening
Subject: 2986 Oakmead Village Court
Contents: California I.D. Number

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 4/14/89 Date Received: 00/00/00
Author: KIM CAMP III
Recipient: CRWQCB - Greg Bartow
Subject: 2986 Oakmead Village Court
Contents: CRWQCB Staff and EPA Comments

Document Type: General Correspondence/Misc. No. of Pages: 1

Administrative Record - 2986 Oakmead Village Court

Document Date:	4/27/89	Date Received:	5/2/89
Author:	KIM CAMP III - Stephen Belomy		
Recipient:	J.V. Lowney & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	California I.D. Number		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	5/8/89	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	SCVWD, Well Department		
Subject:	2986 Oakmead Village Court		
Contents:	Water Well Driller's Reports		
Document Type:	General Correspondence/Misc.	No. of Pages:	10

Document Date:	5/10/89	Date Received:	00/00/00
Author:	Berliner, Cohen & Biagini		
Recipient:	CRWQCB - Stephen Morse		
Subject:	2986 Oakmead Village Court		
Contents:	Site Clean-Up Requirements		
Document Type:	General Correspondence/Misc.	No. of Pages:	5

Document Date:	6/1/89	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	SCVWD		
Subject:	2986 Oakmead Village Court		
Contents:	Request for Private Well Information		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Document Date:	6/13/89	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	CRWQCB - Greg Bartow		
Subject:	2986 Oakmead Village Court		
Contents:	Soil Cuttings		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Administrative Record - 2986 Oakmead Village Court

Document Date:	6/26/89	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	CRWQCB - Greg Bartow		
Subject:	2986 Oakmead Village Court		
Contents:	Data Package for Baseline Public Health Evaluation		
Document Type:	General Correspondence/Misc.	No. of Pages:	12

Document Date:	7/6/89	Date Received:	00/00/00
Author:	KIM CAMP III - Stephen Belomy		
Recipient:	CRWQCB - Community Relations Office		
Subject:	2986 Oakmead Village Court		
Contents:	Community Relations Plans		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	8/7/89	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	City of Mountain View		
Subject:	2986 Oakmead Village Court		
Contents:	Disposal of Soil Cuttings		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	8/28/89	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	CRWQCB/SCVWD/Clement & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	Data Package for Baseline Evaluation		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	9/25/89	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	Metropolitan Life Insurance Company		
Subject:	2986 Oakmead Village Court		
Contents:	Quarter Water Level Measurements		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Administrative Record - 2986 Oakmead Village Court

Document Date:	10/13/89	Date Received:	00/00/00
Author:	Clement Associates		
Recipient:	CRWQCB - John Wolfenden		
Subject:	2986 Oakmead Village Court		
Contents:	Data Package Review		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Document Date:	11/14/89	Date Received:	00/00/00
Author:	City of Mountain View		
Recipient:	J.V. Lowney & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	Disposal of Contaminated Soil		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	12/4/89	Date Received:	00/00/00
Author:	*J.V. Lowney & Associates*		
Recipient:	City of Mountain View		
Subject:	2986 Oakmead Village Court		
Contents:	*Disposal of Soil Cuttings*		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	12/12/89	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	J.V. Lowney & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	NPDES Permit Application		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Document Date:	12/15/89	Date Received:	00/00/00
Author:	City of Mountain View		
Recipient:	J.V. Lowney & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	Disposal of Contaminated Soils		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Administrative Record - 2986 Oakmead Village Court

Document Date: 1/23/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB - Greg Bartow
Subject: 2986 Oakmead Village Court
Contents: NPDES Permit Application

Document Type: General Correspondence/Misc. No. of Pages: 5

Document Date: 1/24/90 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III/Intel
Subject: 2986 and 3000 Oakmead Village Court
Contents: Request for comments on Draft Public Health Evaluation by Clement Associates
Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 1/30/90 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: CRWQCB comments on Draft Remedial Investigation Report
Document Type: General Correspondence/Misc. No. of Pages: 7

Document Date: 2/26/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Comments on Draft Public Health Evaluation

Document Type: General Correspondence/Misc. No. of Pages: 3

Document Date: 3/12/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Installation of Ground Water Extraction and Treatment System
Document Type: General Correspondence/Misc. No. of Pages: 18

Administrative Record - 2986 Oakmead Village Court

Document Date:	3/20/90	Date Received:	00/00/00
Author:	Intel		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	CRWQCB March 16, 1990 Letter		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	4/30/90	Date Received:	00/00/00
Author:	Clement Associates		
Recipient:	CRWQCB - John Wolfenden		
Subject:	2986 Oakmead Village Court		
Contents:	Response to comments on Draft BPHE		
Document Type:	General Correspondence/Misc.	No. of Pages:	5

Document Date:	5/1/90	Date Received:	00/00/00
Author:	SCVWD		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Well 06S1W28P09 Registration		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	5/1/90	Date Received:	00/00/00
Author:	SCVWD		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Well 06S1W28P08 Registration		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	5/1/90	Date Received:	00/00/00
Author:	SCVWD		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Well 06S1W28P07 Registration		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Administrative Record - 2986 Oakmead Village Court

Document Date: 5/17/90 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Notice of Violation

Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 5/18/90 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III/Intel
Subject: 2986 and 3000 Oakmead Village Court
Contents: Notice of Violation - Potential Vertical Conduits

Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 7/5/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Ground Water Production Revenues

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 8/8/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: SCVWD - Well Department
Subject: 2986 Oakmead Village Court
Contents: B-Zone Monitoring Well Application

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 9/20/90 Date Received: 00/00/00
Author: CRWQCB - Stephen Morse
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: CRWQCB and EPA comments on Revised Remedial Investigation
Document Type: General Correspondence/Misc. No. of Pages: 2

Administrative Record - 2986 Oakmead Village Court

Document Date:	11/12/90	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	CRWQCB - Greg Bartow		
Subject:	2986 Oakmead Village Court		
Contents:	4th Quarter Monitoring		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	11/19/90	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	CRWQCB and EPA comments on Draft Feasibility Study		
Document Type:	General Correspondence/Misc.	No. of Pages:	7

Document Date:	12/5/90	Date Received:	00/00/00
Author:	City of Mountain View		
Recipient:	J.V. Lowney & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	Authorization for Disposal of Contaminated Soils		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	12/7/90	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	SCVWD - Well Department		
Subject:	2986 Oakmead Village Court		
Contents:	Water Well Driller's Reports		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	12/19/90	Date Received:	00/00/00
Author:	Levine-Fricke		
Recipient:	CRWQCB		
Subject:	2986 Oakmead Village Court		
Contents:	Comments on JVLA's 3rd Quarter (1990) Sampling Report		
Document Type:	General Correspondence/Misc.	No. of Pages:	4

Administrative Record - 2986 Oakmead Village Court

Document Date:	2/15/91	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	CRWQCB		
Subject:	Request for a Reduction of NPDES Testing		
Contents:	Request for Analytical Reduction		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Document Date:	3/15/91	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	Kim Camp III		
Subject:	2986 Oakmead Village Court		
Contents:	Comments on Final RI and FS		
Document Type:	General Correspondence/Misc.	No. of Pages:	4

Document Date:	3/19/91	Date Received:	00/00/00
Author:	Kimball Small Properties		
Recipient:	CRWQCB		
Subject:	Micro Storage/Intel Magnetics		
Contents:	Comments on CRWQCB Allocation of Responsibility		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Document Date:	3/25/91	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	K C III/Intel/Micro Storage/3000 Oakmead		
Subject:	Combined Micro Storage Corp./Intel Magnetics		
Contents:	Draft Proposed Plan Fact Sheet		
Document Type:	General Correspondence/Misc.	No. of Pages:	9

Document Date:	3/25/91	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	Kim Camp III/Micro Storage/Intel/et. al.		
Subject:	2986 Oakmead Village Court		
Contents:	Draft Proposed Plan Fact Sheet		
Document Type:	General Correspondence/Misc.	No. of Pages:	10

Administrative Record - 2986 Oakmead Village Court

Document Date: 4/12/91 Date Received: 00/00/00
Author: CRWQCB - Steven R.Ritchie
Recipient: Peninsula Times Tribune
Subject: Publication of Public Notice
Contents: Notice of Application & Public Hearing for Discharge Permit
Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 4/19/91 Date Received: 00/00/00
Author: CRWQCB - Greg Bartow
Recipient: Ron Gervason
Subject: 2986 Oakmead Village Court
Contents: Request for CDM to Review Compliance Points
Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 4/26/91 Date Received: 4/29/91
Author: Camp Dresser & McKee, Inc.
Recipient: CRWQCB - Greg Bartow
Subject: 2986 Oakmead Village Court
Contents: Review of Compliance Points for Final R.A.P.
Document Type: General Correspondence/Misc. No. of Pages: 3

Document Date: 4/30/91 Date Received: 00/00/00
Author: CRWQCB
Recipient: Kim Camp III/Intel/ et. al.
Subject: Nonbinding preliminary allocation of responsibil
Contents: Notice of allocation of responsibility
Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 5/2/91 Date Received: 5/9/91
Author: Stutman, Treister & Glatt
Recipient: Kim Camp III/Intel/et.al
Subject: Campeau Corporation California/Kim Camp III
Contents: Discussion of Campeau as Potentially Responsible Party
Document Type: General Correspondence/Misc. No. of Pages: 3

Administrative Record - 2986 Oakmead Village Court

Document Date: 5/15/91 Date Received: 00/00/00
Author: SCVWD - David Chesterman
Recipient: CRWQCB - Greg Bartow
Subject: Comments on Micro Storage/Intel Final RAP
Contents: Comments on RAP

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 5/16/91 Date Received: 5/17/91
Author: Levine-Fricke
Recipient: CRWQCB - Stephen Morse
Subject: 2986 Oakmead Village Court
Contents: Comments on Revisions to Tentative Order

Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 6/17/91 Date Received: 00/00/00
Author: Heller, Ehrman, White & McAuliffe
Recipient: CRWQCB - Stephen Morse
Subject: 2986 Oakmead Village Court
Contents: Comments on Tentative Order

Document Type: General Correspondence/Misc. No. of Pages: 56

Document Date: 6/17/91 Date Received: 00/00/00
Author: Intel
Recipient: CRWQCB
Subject: 2986 Oakmead Village Court
Contents: Comments on Tentative Order

Document Type: General Correspondence/Misc. No. of Pages: 7

Document Date: 6/17/91 Date Received: 00/00/00
Author: Kimball Small Properties
Recipient: CRWQCB - Stephen Morse
Subject: 2986 Oakmead Village Court
Contents: Request for Changes to Tentative Order

Document Type: General Correspondence/Misc. No. of Pages: 10

Administrative Record - 2986 Oakmead Village Court

Document Date:	6/17/91	Date Received:	00/00/00
Author:	Nossaman, Guthner, Knox & Elliot		
Recipient:	CRWQCB - Greg Bartow		
Subject:	2986 Oakmead Village Court		
Contents:	Comments on Tentative Order		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Document Date:	6/20/91	Date Received:	00/00/00
Author:	California DOHS		
Recipient:	CRWQCB - Greg Bartow		
Subject:	2986 Oakmead Village Court		
Contents:	Preliminary Findings of Study by Environmental Epidemiology and Toxicology Branch		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

GROUPED IN CHRONOLOGICAL ORDER

Administrative Record - 2986 Oakmead Village Court

Document Date:	12/22/86	Date Received:	00/00/00
Author:	Weiss Associates		
Recipient:	Intel Corporation		
Subject:	3000 Oakmead Village Court		
Contents:	Final Water Quality Objective		
Document Type:	Technical Report	No. of Pages:	71

Document Date:	4/20/87	Date Received:	4/25/87
Author:	CRWQCB - Stephen Morse		
Recipient:	KIM CAMP III - Peter Fraser		
Subject:	2986 Oakmead Village Court		
Contents:	Approval for Proposed Ground Water Investigation		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Document Date:	5/15/87	Date Received:	00/00/00
Author:	Anametrix		
Recipient:	EMCON Associates		
Subject:	2986 Oakmead Village Court		
Contents:	Analytical Results		
Document Type:	Technical Report	No. of Pages:	4

Document Date:	5/22/87	Date Received:	00/00/00
Author:	International Technology Corporation		
Recipient:	EMCON Associates		
Subject:	2986 Oakmead Village Court		
Contents:	Analytical Results		
Document Type:	Technical Report	No. of Pages:	3

Document Date:	6/1/87	Date Received:	00/00/00
Author:	Emcon Associates		
Recipient:	KIM CAMP III		
Subject:	2986 Oakmead Villlage Court		
Contents:	Hydrogeologic Report		
Document Type:	Technical Report	No. of Pages:	29

Administrative Record - 2986 Oakmead Village Court

Document Date:	11/30/83	Date Received:	00/00/00
Author:	Earth Sciences Associates		
Recipient:	Intel Corporation		
Subject:	3000 Oakmead Village Court		
Contents:	Phase III Ground Water Investigation		
Document Type:	Technical Report	No. of Pages:	18

Document Date:	6/27/84	Date Received:	00/00/00
Author:	Daniel Sokol, Ph.D.		
Recipient:	Intel		
Subject:	3000 Oakmead Village Court		
Contents:	Proposed Remedial Contamination Action Program		
Document Type:	Technical Report	No. of Pages:	20

Document Date:	4/23/85	Date Received:	00/00/00
Author:	Weiss Associates		
Recipient:	Intel Corporation		
Subject:	3000 Oakmead Village Court		
Contents:	Progress Report, Ground Water Remedial Action		
Document Type:	Technical Report	No. of Pages:	38

Document Date:	10/15/85	Date Received:	00/00/00
Author:	Wahler Associates		
Recipient:	Intel Corporation		
Subject:	3000 Oakmead Village Court		
Contents:	Environmental Monitoring Report - Intel Tank Replacement		
Document Type:	Technical Report	No. of Pages:	6

Document Date:	10/28/86	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	*KIM CAMP III - Peter Fraser*		
Subject:	2986 Oakmead Village Court		
Contents:	Request of Information - Past Chemical Handling/Usage		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Administrative Record - 2986 Oakmead Village Court

Document Date:	11/19/87	Date Received:	00/00/00
Author:	Geonomics, Inc.		
Recipient:	J.V. Lowney & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	Addendum to Soil Vapor Survey Report		
Document Type:	Technical Report	No. of Pages:	1

Document Date:	12/15/87	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	KIM CAMP III - Peter Fraser		
Subject:	2986 Oakmead Village Court		
Contents:	Ground Water Quality Reconnaissance Investigation		
Document Type:	Technical Report	No. of Pages:	22

Document Date:	3/30/88	Date Received:	00/00/00
Author:	Weiss Associates		
Recipient:	Intel Corporation		
Subject:	3000 Oakmead Village Court		
Contents:	Quality Assurance/Quality Control Plan/ Sampling Plan and Site Health & Safety Plan		
Document Type:	Technical Report	No. of Pages:	73

Document Date:	4/21/88	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Request for Technical Report		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Document Date:	5/20/88	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	CRWQCB - Stephen Morse		
Subject:	2986 Oakmead Village Court		
Contents:	Definition of the Contamination Source		
Document Type:	Proposal/Tentative Order	No. of Pages:	2

Administrative Record - 2986 Oakmead Village Court

Document Date: 7/18/87 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III - Peter M. Fraser
Subject: 2986 Oakmead Village Court
Contents: Clarification of Solvent Origin

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 7/18/87 Date Received: 00/00/00
Author: CRWQCB
Recipient: Boehringer Ingelheim Pharmaceuticals
Subject: 2986 Oakmead Village Court
Contents: Request for Chemical Usage Information

Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 8/17/87 Date Received: 00/00/00
Author: CRWQCB - Stephen Morse
Recipient: KIM CAMP III - Peter Fraser
Subject: 2986 Oakmead Village Court
Contents: Approval of Ground Water Investigation

Document Type: Proposal/Tentative Order No. of Pages: 1

Document Date: 8/17/87 Date Received: 8/18/87
Author: Taylor & Stanley
Recipient: CRWQCB - Stephen Morse
Subject: 2986 Oakmead Village Court
Contents: Request for Chemical Usage Information

Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 10/9/87 Date Received: 00/00/00
Author: Geonomics, Inc.
Recipient: J.V. Lowney & Associates
Subject: 2986 Oakmead Village Court
Contents: Contour Map and Report

Document Type: General Correspondence/Misc. No. of Pages: 1

Administrative Record - 2986 Oakmead Village Court

Document Date: 6/1/88 Date Received: 00/00/00
Author: Tracer Research Corp.
Recipient: J.V. Lowney & Associates
Subject: 2986 Oakmead Village Court
Contents: Shallow Soil Gas Investigation

Document Type: Technical Report No. of Pages: 16

Document Date: 6/17/88 Date Received: 00/00/00
Author: CRWQCB
Recipient: Toxics and Waste Management Division
Subject: 2986 Oakmead Village Court
Contents: Site Name and Plume Definition

Document Type: Proposal/Tentative Order No. of Pages: 1

Document Date: 7/8/88 Date Received: 7/20/88
Author: CRWQCB
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Request for Submittal of a Proposed Work Plan

Document Type: Proposal/Tentative Order No. of Pages: 3

Document Date: 8/3/88 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Soil Gas Survey and Soil Quality Analysis

Document Type: Technical Report No. of Pages: 8

Document Date: 8/4/88 Date Received: 8/9/88
Author: CRWQCB - Jeff Willett
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Draft Tentative Order for Site Clean-Up Requirements
Document Type: Proposal/Tentative Order No. of Pages: 9

Administrative Record - 2986 Oakmead Village Court

Document Date: 8/8/88 Date Received: 8/9/88
Author: KIM CAMP III - Stephen Belomy
Recipient: J.V. Lowney & Associates
Subject: 2986 Oakmead Village Court
Contents: Enclosure of copy of Jeff Willett's Letter (8/4/88)

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 8/16/88 Date Received: 8/17/88
Author: CRWQCB - Stephen Morse
Recipient: KIM CAMP III/Micro Storage/Intel
Subject: 2986 Oakmead Village Court
Contents: Notice of Tentative Order for Site Clean-Up Requirements
Document Type: Proposal/Tentative Order No. of Pages: 8

Document Date: 9/8/88 Date Received: 9/11/88
Author: CRWQCB - Stephen Morse
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Confirmation of Decisions Regarding Remedial Investigation
Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 9/13/88 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Changes in Tentative Order

Document Type: Proposal/Tentative Order No. of Pages: 1

Document Date: 9/27/88 Date Received: 00/00/00
Author: EPA
Recipient: CRWQCB - Jeff Willett
Subject: 2986 Oakmead Village Court
Contents: Review of Contaminant Plum for Intel Magnetics Site
Document Type: Technical Report No. of Pages: 2

Administrative Record - 2986 Oakmead Village Court

Document Date:	9/30/88	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Work Plan for Remedial Investigation/Feasibility Study		
Document Type:	Technical Report	No. of Pages:	29

Document Date:	9/30/88	Date Received:	00/00/00
Author:	Jacobs Engineering/Metcalf & Eddy		
Recipient:	EPA		
Subject:	3000 Oakmead Village Court		
Contents:	Contamination Plume Evaluation		
Document Type:	Technical Report	No. of Pages:	35

Document Date:	10/12/88	Date Received:	00/00/00
Author:	EPA		
Recipient:	CRWQCB		
Subject:	2986 Oakmead Village Court		
Contents:	Primary Source of Contamination		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	11/7/88	Date Received:	11/10/88
Author:	KIM CAMP III - Stephen Belomy		
Recipient:	J.V. Lowney & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	Report prepard for the EPA regarding Intel Site		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	12/1/88	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Progress Report for Remedial Investigation/Feasibility Study		
Document Type:	Technical Report	No. of Pages:	3

Administrative Record - 2986 Oakmead Village Court

Document Date:	12/20/88	Date Received:	12/21/88
Author:	CRWQCB - Stephen Morse		
Recipient:	KIM CAMP III/Micro Storage/Intel		
Subject:	2986 Oakmead Village Court		
Contents:	Notice of Tentative Order Site Clean-Up Requirements		
Document Type:	Proposal/Tentative Order	No. of Pages:	9

Document Date:	12/28/88	Date Received:	1/3/89
Author:	CRWQCB		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	CRWQCB and EPA Comments on Remedial Investigation/Feasibility Study		
Document Type:	General Correspondence/Misc.	No. of Pages:	6

Document Date:	12/30/88	Date Received:	1/3/89
Author:	CRWQCB		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	CRWQCB and EPA comments on Quality Assurance Project Plan		
Document Type:	General Correspondence/Misc.	No. of Pages:	4

Document Date:	1/3/89	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Review of Draft Community Relations Plan		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	1/13/89	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Comments on Draft Community Relations Plan		
Document Type:	General Correspondence/Misc.	No. of Pages:	3

Administrative Record - 2986 Oakmead Village Court

Document Date:	1/25/89	Date Received:	1/26/89
Author:	CRWQCB - Steven Ritchie		
Recipient:	KIM CAMP III/Micro Storage/Intel		
Subject:	2986 Oakmead Village Court		
Contents:	Certified Copy of a CRWQCB - Adopted 1/25/89		
Document Type:	Proposal/Tentative Order	No. of Pages:	2

Document Date:	2/6/89	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Revised Work Plan for Remedial Investigation/Feasibility Study		
Document Type:	Technical Report	No. of Pages:	1

Document Date:	2/7/89	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III/ODH/Intel/ Community Assoc.		
Subject:	2986 Oakmead Village Court		
Contents:	Request for Monitoring Wells Data		
Document Type:	Proposal/Tentative Order	No. of Pages:	2

Document Date:	2/15/89	Date Received:	00/00/00
Author:	KIM CAMP III - Stephen Belomy		
Recipient:	J.V. Lowney & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	Request for Response to (CRWQCB) Greg Bartow's Letter		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	2/22/89	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	CRWQCB - Stephen Morse		
Subject:	2986 Oakmead Village Court		
Contents:	Resurveying of Monitoring Wells		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Administrative Record - 2986 Oakmead Village Court

Document Date: 3/17/89 Date Received: 3/21/89
Author: CRWQCB
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: CRWQCB and EPA comments on the revised QAPP and Heath and Safety Plan
Document Type: General Correspondence/Misc. No. of Pages: 4

Document Date: 3/24/89 Date Received: 00/00/00
Author: CRWQCB - Steven Ritchie
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Notice to KIM CAMP III of Failure to Comply
Document Type: Proposal/Tentative Order No. of Pages: 1

Document Date: 3/24/89 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: CRWQCB and EPA comments on the revised Remedial Action Plan
Document Type: Proposal/Tentative Order No. of Pages: 1

Document Date: 3/29/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Quality Assurance Project Plan/Sampling Plan and Health and Safety Plan
Document Type: Technical Report No. of Pages: 58

Document Date: 3/31/89 Date Received: 00/00/00
Author: CRWQCB
Recipient: Santa Clara County Cercla Sites
Subject: Superfund Baseline Public Health Evaluations
Contents: BPHE Workshop
Document Type: General Correspondence/Misc. No. of Pages: 1

Administrative Record - 2986 Oakmead Village Court

Document Date: 4/1/89 Date Received: 4/18/89
Author: Chips Environmental Consultants
Recipient: J.V. Lowney & Associates
Subject: 2986 Oakmead Village Court
Contents: Field Sampling Analysis of Soil Gases

Document Type: Technical Report No. of Pages: 1

Document Date: 4/4/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB - Steve Morse
Subject: 2986 Oakmead Village Court
Contents: Addendum to Revised Work Plan

Document Type: Technical Report No. of Pages: 1

Document Date: 4/4/89 Date Received: 00/00/00
Author: KIM CAMP III - Stephen Belomy
Recipient: Department of Health Services
Subject: 2986 Oakmead Village Court
Contents: California I.D. Number Application

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 4/13/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: SCVWD, Wells Department
Subject: 2986 Oakmead Village Court
Contents: Monitoring Well Permit Application (2)

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 4/14/89 Date Received: 00/00/00
Author: CRWQCB - Steve Morse
Recipient: KIM CAMP III/Micro Storage/Intel
Subject: 2986 Oakmead Village Court
Contents: Notice of Tentative Order Site Clean-Up Requirements
Document Type: Proposal/Tentative Order No. of Pages: 10

Administrative Record - 2986 Oakmead Village Court

Document Date:	4/14/89	Date Received:	4/17/89
Author:	KIM CAMP III - Stephen Belomy		
Recipient:	CDHS - Cindy Bening		
Subject:	2986 Oakmead Village Court		
Contents:	California I.D. Number		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	4/14/89	Date Received:	00/00/00
Author:	KIM CAMP III		
Recipient:	CRWQCB - Greg Bartow		
Subject:	2986 Oakmead Village Court		
Contents:	CRWQCB Staff and EPA Comments		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	4/27/89	Date Received:	5/2/89
Author:	KIM CAMP III - Stephen Belomy		
Recipient:	J.V. Lowney & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	California I.D. Number		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	5/8/89	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	SCVWD, Well Department		
Subject:	2986 Oakmead Village Court		
Contents:	Water Well Driller's Reports		
Document Type:	General Correspondence/Misc.	No. of Pages:	10

Document Date:	5/10/89	Date Received:	00/00/00
Author:	Berliner, Cohen & Biagini		
Recipient:	CRWQCB - Stephen Morse		
Subject:	2986 Oakmead Village Court		
Contents:	Site Clean-Up Requirements		
Document Type:	General Correspondence/Misc.	No. of Pages:	5

Administrative Record - 2986 Oakmead Village Court

Document Date: 6/1/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: SCVWD
Subject: 2986 Oakmead Village Court
Contents: Request for Private Well Information

Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 6/2/89 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: BPHE Baseline Package Request

Document Type: Proposal/Tentative Order No. of Pages: 2

Document Date: 6/5/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III/Intel/ODH/Community Assoc.
Subject: 2986 Oakmead Village Court
Contents: 2nd Quarter Ground Water Elevations Report

Document Type: Technical Report No. of Pages: 6

Document Date: 6/8/89 Date Received: 6/12/89
Author: CRWQCB - Stephen Morse
Recipient: KIM CAMP III/Micro Storage/Intel
Subject: 2986 Oakmead Village Court
Contents: Certified copy of Board's 5/17/89 Order

Document Type: Proposal/Tentative Order No. of Pages: 1

Document Date: 6/12/89 Date Received: 6/13/89
Author: KIM CAMP III - Stephen Belomy
Recipient: J.V. Lowney & Associates
Subject: 2986 Oakmead Village Court
Contents: Copy of New Water Board Order for KIM CAMP III

Document Type: Proposal/Tentative Order No. of Pages: 1

Administrative Record - 2986 Oakmead Village Court

Document Date:	6/13/89	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	CRWQCB - Greg Bartow		
Subject:	2986 Oakmead Village Court		
Contents:	Soil Cuttings		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Document Date:	6/26/89	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	CRWQCB - Greg Bartow		
Subject:	2986 Oakmead Village Court		
Contents:	Data Package for Baseline Public Health Evaluation		
Document Type:	General Correspondence/Misc.	No. of Pages:	12

Document Date:	7/6/89	Date Received:	00/00/00
Author:	KIM CAMP III - Stephen Belomy		
Recipient:	CRWQCB - Community Relations Office		
Subject:	2986 Oakmead Village Court		
Contents:	Community Relations Plans		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	7/10/89	Date Received:	7/11/89
Author:	KIM CAMP III - Stephen Belomy		
Recipient:	CRWQCB - Greg Bartow		
Subject:	2986 Oakmead Village Court		
Contents:	Board Order #89-068		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Document Date:	8/7/89	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	City of Mountain View		
Subject:	2986 Oakmead Village Court		
Contents:	Disposal of Soil Cuttings		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Administrative Record - 2986 Oakmead Village Court

Document Date: 8/8/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III/CRWQCB
Subject: 2986 Oakmead Village Court
Contents: Proposal for Administrative Record

Document Type: Proposal/Tentative Order No. of Pages: 2

Document Date: 8/28/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Proposal for Interim Remedial Actions

Document Type: Proposal/Tentative Order No. of Pages: 11

Document Date: 8/28/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/SCVWD/Clement & Associates
Subject: 2986 Oakmead Village Court
Contents: Data Package for Baseline Evaluation

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 8/31/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/EPA/SCVWD/KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: Vertical Conduit Study

Document Type: Technical Report No. of Pages: 7

Document Date: 9/15/89 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III/Intel
Subject: 2986/3000 Oakmead Village Court
Contents: Community Relations Plan

Document Type: Technical Report No. of Pages: 17

Administrative Record - 2986 Oakmead Village Court

Document Date: 9/25/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: Metropolitan Life Insurance Company
Subject: 2986 Oakmead Village Court
Contents: Quarter Water Level Measurements

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 10/2/89 Date Received: 00/00/00
Author: CRWQCB
Recipient: J.V. Lowney & Associates
Subject: 2986 Oakmead Village Court
Contents: QAPP Approval

Document Type: Proposal/Tentative Order No. of Pages: 1

Document Date: 10/13/89 Date Received: 00/00/00
Author: Clement Associates
Recipient: CRWQCB - John Wolfenden
Subject: 2986 Oakmead Village Court
Contents: Data Package Review

Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 10/19/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III/ODH/Intel/Community Assoc.
Subject: 2986 Oakmead Village Court
Contents: 3rd Quarter Ground Water Level Measurements

Document Type: Technical Report No. of Pages: 3

Document Date: 10/24/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/EPA/SCVWD/KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: 3rd Quarter Sampling Report

Document Type: Technical Report No. of Pages: 12

Administrative Record - 2986 Oakmead Village Court

Document Date: 10/31/89 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III/Intel
Subject: 2986 and 3000 Oakmead Village Court
Contents: Public Health Evaluation Data Gaps

Document Type: Proposal/Tentative Order No. of Pages: 1

Document Date: 10/31/89 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Interim Remedial Actions Proposal

Document Type: Proposal/Tentative Order No. of Pages: 2

Document Date: 11/14/89 Date Received: 00/00/00
Author: City of Mountain View
Recipient: J.V. Lowney & Associates
Subject: 2986 Oakmead Village Court
Contents: Disposal of Contaminated Soil

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 11/21/89 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: Request for Technical Report Documenting Interim Remedial Actions

Document Type: Proposal/Tentative Order No. of Pages: 1

Document Date: 12/4/89 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: City of Mountain View
Subject: 2986 Oakmead Village Court
Contents: Disposal of Soil Cuttings

Document Type: General Correspondence/Misc. No. of Pages: 1

Administrative Record - 2986 Oakmead Village Court

Document Date:	12/5/89	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III/Intel		
Subject:	2986 and 3000 Oakmead Village Court		
Contents:	Vertical Conduit Study Coments		
Document Type:	Proposal/Tentative Order	No. of Pages:	2

Document Date:	12/12/89	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	J.V. Lowney & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	NPDES Permit Application		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Document Date:	12/15/89	Date Received:	00/00/00
Author:	City of Mountain View		
Recipient:	J.V. Lowney & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	Disposal of Contaminated Soils		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	1/17/90	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	KIM CAMP III/ODH/Intel/Community Assoc.		
Subject:	2986 Oakmead Village Court		
Contents:	Quarterly Ground Water Elevations Report		
Document Type:	Technical Report	No. of Pages:	3

Document Date:	1/23/90	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	CRWQCB - Greg Bartow		
Subject:	2986 Oakmead Village Court		
Contents:	NPDES Permit Application		
Document Type:	General Correspondence/Misc.	No. of Pages:	5

Administrative Record - 2986 Oakmead Village Court

Document Date:	1/24/90	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III/Intel		
Subject:	2986 and 3000 Oakmead Village Court		
Contents:	Request for comments on Draft Public Health Evaluation by Clement Associates		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	1/30/90	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	CRWQCB/EPA/SCVWD/KIM CAMP III		
Subject:	2986 Oakmead Village Court		
Contents:	4th Quarter Sampling Report		
Document Type:	Technical Report	No. of Pages:	13

Document Date:	1/30/90	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	CRWQCB comments on Draft Remedial Investigation Report		
Document Type:	General Correspondence/Misc.	No. of Pages:	7

Document Date:	2/7/90	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III		
Subject:	2986 Oakmead Village Court		
Contents:	Tentative Waste Discharge Requirements		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Document Date:	2/16/90	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	3000 Oakmead Village Drive Ltd.		
Subject:	3000 Oakmead Village Court		
Contents:	Access to 3000 Oakmead Village Court		
Document Type:		No. of Pages:	2

Administrative Record - 2986 Oakmead Village Court

Document Date:	2/26/90	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Comments on Draft Public Health Evaluation		
Document Type:	General Correspondence/Misc.	No. of Pages:	3

Document Date:	3/12/90	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Installation of Ground Water Extraction and Treatment System		
Document Type:	General Correspondence/Misc.	No. of Pages:	18

Document Date:	3/16/90	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Additional Tasks - Remedial Investigation/Interim Remedial Measures		
Document Type:	Proposal/Tentative Order	No. of Pages:	3

Document Date:	3/16/90	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III/Intel		
Subject:	2986 and 3000 Oakmead Village Court		
Contents:	Destruction of Potential Vertical Conduits		
Document Type:	Proposal/Tentative Order	No. of Pages:	2

Document Date:	3/20/90	Date Received:	00/00/00
Author:	Intel		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	CRWQCB March 16, 1990 Letter		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Administrative Record - 2986 Oakmead Village Court

Document Date: 3/21/90 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Self Monitoring Program, Adopted 3/21/90

Document Type: Proposal/Tentative Order No. of Pages: 7

Document Date: 4/12/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III/ODH/Intel/Community Assoc.
Subject: 2986 Oakmead Village Court
Contents: Quarterly Ground Water Elevations Report

Document Type: Technical Report No. of Pages: 4

Document Date: 4/23/90 Date Received: 00/00/00
Author: Intel
Recipient: CRWQCB - Greg Bartow
Subject: 3000 Oakmead Village Court
Contents: Destruction of Wells (4) at Micro Storage/ Intel Magnetics Site

Document Type: Technical Report No. of Pages: 1

Document Date: 4/25/90 Date Received: 00/00/00
Author: Weiss Associates
Recipient: Intel Corporation
Subject: 3000 Oakmead Village Court
Contents: Monitoring Well Destruction

Document Type: Technical Report No. of Pages: 3

Document Date: 4/30/90 Date Received: 00/00/00
Author: Clement Associates
Recipient: CRWQCB - John Wolfenden
Subject: 2986 Oakmead Village Court
Contents: Response to comments on Draft BPHE

Document Type: General Correspondence/Misc. No. of Pages: 5

Administrative Record - 2986 Oakmead Village Court

Document Date:	5/1/90	Date Received:	00/00/00
Author:	Clement Associates		
Recipient:	CRWQCB - John Wolfenden		
Subject:	2986 Oakmead Village Court		
Contents:	Final BPHE		
Document Type:	Technical Report	No. of Pages:	1

Document Date:	5/1/90	Date Received:	00/00/00
Author:	SCVWD		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Well 06S1W28P09 Registration		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	5/1/90	Date Received:	00/00/00
Author:	SCVWD		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Well 06S1W28P08 Registration		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	5/1/90	Date Received:	00/00/00
Author:	SCVWD		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Well 06S1W28P07 Registration		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	5/17/90	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	Notice of Violation		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Administrative Record - 2986 Oakmead Village Court

Document Date: 5/18/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/EPA/SCVWD/KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: 1st Quarter Sampling Report

Document Type: Technical Report No. of Pages: 13

Document Date: 5/18/90 Date Received: 00/00/00
Author: CRWQCB
Recipient: KIM CAMP III/Intel
Subject: 2986 and 3000 Oakmead Village Court
Contents: Notice of Violation - Potential Vertical Conduits

Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 7/5/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Ground Water Production Revenues

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 7/27/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/EPA/SCVWD/KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: 2nd Quarter Sampling Report

Document Type: Technical Report No. of Pages: 16

Document Date: 8/8/90 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: SCVWD - Well Department
Subject: 2986 Oakmead Village Court
Contents: B-Zone Monitoring Well Application

Document Type: General Correspondence/Misc. No. of Pages: 1

Administrative Record - 2986 Oakmead Village Court

Document Date:	8/9/90	Date Received:	00/00/00
Author:	EPA		
Recipient:	CRWQCB		
Subject:	2986 Oakmead Village Court		
Contents:	Draft Feasibility Study Approval		
Document Type:	Technical Report	No. of Pages:	1

Document Date:	9/20/90	Date Received:	00/00/00
Author:	CRWQCB - Stephen Morse		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	CRWQCB and EPA comments on Revised Remedial Investigation		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Document Date:	10/31/90	Date Received:	00/00/00
Author:	Landels, Ripley & Diamond		
Recipient:	CRWQCB - Greg Bartow		
Subject:	3165 Kifer Road		
Contents:	Ground Water Elevations		
Document Type:	Technical Report	No. of Pages:	1

Document Date:	11/7/90	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	CRWQCB/EPA/SCVWD/KIM CAMP III		
Subject:	2986 Oakmead Village Court		
Contents:	3rd Quarter Sampling Report		
Document Type:	Technical Report	No. of Pages:	14

Document Date:	11/12/90	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	CRWQCB - Greg Bartow		
Subject:	2986 Oakmead Village Court		
Contents:	4th Quarter Monitoring		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Administrative Record - 2986 Oakmead Village Court

Document Date:	11/19/90	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KIM CAMP III - Stephen Belomy		
Subject:	2986 Oakmead Village Court		
Contents:	CRWQCB and EPA comments on Draft Feasibility Study		
Document Type:	General Correspondence/Misc.	No. of Pages:	7

Document Date:	11/29/90	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	City of Mountain View		
Subject:	2986 Oakmead Village Court		
Contents:	Disposal of Soil Cuttings		
Document Type:	Technical Report	No. of Pages:	2

Document Date:	12/5/90	Date Received:	00/00/00
Author:	City of Mountain View		
Recipient:	J.V. Lowney & Associates		
Subject:	2986 Oakmead Village Court		
Contents:	Authorization for Disposal of Contaminated Soils		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	12/7/90	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	SCVWD - Well Department		
Subject:	2986 Oakmead Village Court		
Contents:	Water Well Driller's Reports		
Document Type:	General Correspondence/Misc.	No. of Pages:	1

Document Date:	12/19/90	Date Received:	00/00/00
Author:	Levine-Fricke		
Recipient:	CRWQCB		
Subject:	2986 Oakmead Village Court		
Contents:	Comments on JVLA's 3rd Quarter (1990) Sampling Report		
Document Type:	General Correspondence/Misc.	No. of Pages:	4

Administrative Record - 2986 Oakmead Village Court

Document Date: 1/9/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/EPA/SCVWD/KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: Final Remedial Investigation

Document Type: Technical Report No. of Pages: 44

Document Date: 1/9/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/EPA/SCVWD/KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: Feasibility Study

Document Type: Technical Report No. of Pages: 73

Document Date: 1/9/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: KIM CAMP III - Stephen Belomy
Subject: 2986 Oakmead Village Court
Contents: Proposed Plan

Document Type: Proposal/Tentative Order No. of Pages: 6

Document Date: 1/18/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB/EPA/SCVWD/KIM CAMP III
Subject: 2986 Oakmead Village Court
Contents: 4th Quarter Sampling Report

Document Type: Technical Report No. of Pages: 14

Document Date: 2/14/91 Date Received: 00/00/00
Author: CRWQCB - Stephen I. Morse
Recipient: Kim Camp III
Subject: Administrative Record
Contents: Request for Update of Administrative Record

Document Type: Proposal/Tentative Order No. of Pages: 2

Administrative Record - 2986 Oakmead Village Court

Document Date: 2/15/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB
Subject: January 1991 NPDES Monitoring Report
Contents: Results of Effluent Monitoring

Document Type: Technical Report No. of Pages: 27

Document Date: 2/15/91 Date Received: 2/19/91
Author: CRWQCB - Stephen I. Morse
Recipient: Intel Corporation
Subject: Administrative Record
Contents: Request for Update of Administrative Record

Document Type: Proposal/Tentative Order No. of Pages: 2

Document Date: 2/15/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB
Subject: Request for a Reduction of NPDES Testing
Contents: Request for Analytical Reduction

Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 3/14/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB
Subject: February 1991 NPDES Monitoring Report
Contents: Results of Effluent Monitoring

Document Type: Technical Report No. of Pages: 36

Document Date: 3/15/91 Date Received: 00/00/00
Author: CRWQCB
Recipient: Kim Camp III
Subject: 2986 Oakmead Village Court
Contents: Comments on Final RI and FS

Document Type: General Correspondence/Misc. No. of Pages: 4

Administrative Record - 2986 Oakmead Village Court

Document Date: 3/19/91 Date Received: 00/00/00
Author: Kimball Small Properties
Recipient: CRWQCB
Subject: Micro Storage/Intel Magnetics
Contents: Comments on CRWQCB Allocation of Responsibility
Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 3/25/91 Date Received: 00/00/00
Author: CRWQCB
Recipient: K C III/Intel/Micro Storage/3000 Oakmead
Subject: Combined Micro Storage Corp./Intel Magnetics
Contents: *Draft Proposed Plan Fact Sheet*

Document Type: General Correspondence/Misc. No. of Pages: 9

Document Date: 3/25/91 Date Received: 00/00/00
Author: CRWQCB
Recipient: Kim Camp III/Micro Storage/Intel/et. al.
Subject: 2986 Oakmead Village Court
Contents: Draft Proposed Plan Fact Sheet

Document Type: General Correspondence/Misc. No. of Pages: 10

Document Date: 3/28/91 Date Received: 00/00/00
Author: CRWQCB - Steven R. Ritchie
Recipient: Kim Camp III/Intel/et. al.
Subject: Proposed R.A.P. & Site Cleanup Requirements
Contents: Tentative Order

Document Type: Proposal/Tentative Order No. of Pages: 47

Document Date: 4/4/91 Date Received: 00/00/00
Author: CRWQCB
Recipient: Kim Camp III/Intel/ et. al.
Subject: Combined Micro Storage Corp./Intel Magnetics S
Contents: Additions to Tentative Order

Document Type: Proposal/Tentative Order No. of Pages: 4

Administrative Record - 2986 Oakmead Village Court

Document Date:	4/12/91	Date Received:	00/00/00
Author:	CRWQCB - Stephen I. Morse		
Recipient:	Intel Corporation		
Subject:	Notice of Tentative Order		
Contents:	NPDES Permit for Intel		
Document Type:	Proposal/Tentative Order	No. of Pages:	1

Document Date:	4/12/91	Date Received:	00/00/00
Author:	CRWQCB - Steven R.Ritchie		
Recipient:	Peninsula Times Tribune		
Subject:	Publication of Public Notice		
Contents:	Notice of Application & Public Hearing for Discharge Permit		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Document Date:	4/16/91	Date Received:	00/00/00
Author:	J.V. Lowney & Associates		
Recipient:	CRWQCB		
Subject:	March 1991 NPDES Monitoring Report		
Contents:	Results of Effluent Monitoring		
Document Type:	Technical Report	No. of Pages:	31

Document Date:	4/16/91	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	Campeau Corp./Kim Camp III/Westal Corp.		
Subject:	2986 Oakmead Village Court		
Contents:	Modifications to Tentative Order to Include Four Additional Potentially Responsible Parties.		
Document Type:	Proposal/Tentative Order	No. of Pages:	3

Document Date:	4/19/91	Date Received:	00/00/00
Author:	CRWQCB - Greg Bartow		
Recipient:	Ron Gervason		
Subject:	2986 Oakmead Village Court		
Contents:	Request for CDM to Review Compliance Points		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Administrative Record - 2986 Oakmead Village Court

Document Date: 4/26/91 Date Received: 4/29/91
Author: Camp Dresser & McKee, Inc.
Recipient: CRWQCB - Greg Bartow
Subject: 2986 Oakmead Village Court
Contents: Review of Compliance Points for Final R.A.P.

Document Type: General Correspondence/Misc. No. of Pages: 3

Document Date: 4/30/91 Date Received: 00/00/00
Author: CRWQCB
Recipient: Kim Camp III/Intel/ et. al.
Subject: Nonbinding preliminary allocation of responsibil
Contents: Notice of allocation of responsibility

Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 5/1/91 Date Received: 00/00/00
Author: CRWQCB - Stephen I. Morse
Recipient: Kim Camp III/Intel/et. al.
Subject: Notice of intent to revise tentative order
Contents: Additional tasks to be included in tentative order

Document Type: Proposal/Tentative Order No. of Pages: 3

Document Date: 5/2/91 Date Received: 5/9/91
Author: Stutman, Treister & Glatt
Recipient: Kim Camp III/Intel/et.al
Subject: Campeau Corporation California/Kim Camp III
Contents: Discussion of Campeau as Potentially Responsible Party

Document Type: General Correspondence/Misc. No. of Pages: 3

Document Date: 5/8/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: CRWQCB
Subject: April NPDES Monitoring Report
Contents: Results of NPDES Monitoring

Document Type: Technical Report No. of Pages: 28

Administrative Record - 2986 Oakmead Village Court

Document Date: 5/14/91 Date Received: 00/00/00
Author: J.V. Lowney & Associates
Recipient: Kim Camp III
Subject: Feasibility Study
Contents: Feasibility Study for 2986 Oakmead Village Court.

Document Type: Technical Report No. of Pages: 104

Document Date: 5/15/91 Date Received: 00/00/00
Author: SCVWD - David Chesterman
Recipient: CRWQCB - Greg Bartow
Subject: Comments on Micro Storage/Intel Final RAP
Contents: Comments on RAP

Document Type: General Correspondence/Misc. No. of Pages: 1

Document Date: 5/16/91 Date Received: 5/17/91
Author: Levine-Fricke
Recipient: CRWQCB - Stephen Morse
Subject: 2986 Oakmead Village Court
Contents: Comments on Revisions to Tentative Order

Document Type: General Correspondence/Misc. No. of Pages: 2

Document Date: 6/4/91 Date Received: 00/00/00
Author: Lowney Associates
Recipient: Kim Camp III
Subject: 2986 Oakmead Village Court
Contents: 1st Quarter 1991 Monitoring Report

Document Type: Technical Report No. of Pages: 94

Document Date: 6/6/91 Date Received: 00/00/00
Author: EPA - Rose Marie Caraway
Recipient: CRWQCB - Greg Bartow
Subject: 2986 Oakmead Village Court
Contents: Comments on Proposed Final Remedial Action Plan
Document Type: Proposal/Tentative Order No. of Pages: 4

Administrative Record - 2986 Oakmead Village Court

Document Date:	6/12/91	Date Received:	00/00/00
Author:	Weiss Associates		
Recipient:	Intel Corporation		
Subject:	Assessment of the Responsibility		
Contents:	Assessment of the Responsibility of Intel for Future Monitoring and Cleanup.		
Document Type:	Technical Report	No. of Pages:	25

Document Date:	6/17/91	Date Received:	00/00/00
Author:	Heller, Ehrman, White & McAuliffe		
Recipient:	CRWQCB - Stephen Morse		
Subject:	2986 Oakmead Village Court		
Contents:	Comments on Tentative Order		
Document Type:	General Correspondence/Misc.	No. of Pages:	56

Document Date:	6/17/91	Date Received:	00/00/00
Author:	Intel		
Recipient:	CRWQCB		
Subject:	2986 Oakmead Village Court		
Contents:	Comments on Tentative Order		
Document Type:	General Correspondence/Misc.	No. of Pages:	7

Document Date:	6/17/91	Date Received:	00/00/00
Author:	Kimball Small Properties		
Recipient:	CRWQCB - Stephen Morse		
Subject:	2986 Oakmead Village Court		
Contents:	Request for Changes to Tentative Order		
Document Type:	General Correspondence/Misc.	No. of Pages:	10

Document Date:	6/17/91	Date Received:	00/00/00
Author:	Nossaman, Guthner, Knox & Elliot		
Recipient:	CRWQCB - Greg Bartow		
Subject:	2986 Oakmead Village Court		
Contents:	Comments on Tentative Order		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Administrative Record - 2986 Oakmead Village Court

Document Date:	6/20/91	Date Received:	00/00/00
Author:	California DOHS		
Recipient:	CRWQCB - Greg Bartow		
Subject:	2986 Oakmead Village Court		
Contents:	Preliminary Findings of Study by Environmental Epidemiology and Toxicology Branch		
Document Type:	General Correspondence/Misc.	No. of Pages:	2

Document Date:	7/1/91	Date Received:	00/00/00
Author:	Lowney Associates		
Recipient:	CRWQCB		
Subject:	May 1991 NPDES Monitoring Report		
Contents:	Results of NPDES Monitoring		
Document Type:	Technical Report	No. of Pages:	27

Document Date:	7/3/91	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	Kim Camp III/Intel/et. al.		
Subject:	Revised Tentative Order Proposed Final Remedial		
Contents:	Tentative Order		
Document Type:	Proposal/Tentative Order	No. of Pages:	66

Document Date:	7/14/91	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	KC III/Micro Storage/Intel/EPA/Lowney		
Subject:	Tentative Order		
Contents:	Revisions to Tentative Order		
Document Type:	Proposal/Tentative Order	No. of Pages:	3

Document Date:	7/26/91	Date Received:	00/00/00
Author:	Lowney Associates		
Recipient:	Kim Camp III/CRWQCB		
Subject:	2986 Oakmead Village Court		
Contents:	Proposal for Northwest Plume Definition		
Document Type:	Proposal/Tentative Order	No. of Pages:	4

Administrative Record - 2986 Oakmead Village Court

Document Date:	7/29/91	Date Received:	00/00/00
Author:	CRWQCB		
Recipient:	Kimp Camp III/Intel/et. al.		
Subject:	Order - Site Cleanup Requirements		
Contents:	Order No. 91-119		
Document Type:	Proposal/Tentative Order	No. of Pages:	66